DOCUMENT RESUME

ED 086 932 CG 008 642

AUTHOR	Sabatino, David A.
TITLE	Neglected and Delinquent Children.
INSTITUTION	Wilkes Coll., Wilkes-Barre, Pa. Educational Development Center.
SPONS AGENCY	Pennsylvania State Dept. of Education, Harrisburg.
PUB DATE	73
NOTE	244p.
EDRS PRICE	MF-$0.65 HC-$9.87
DESCRIPTORS	*Child Welfare; Corrective Institutions; *Delinquent Identification; Delinquent Rehabilitation; Delinquents; Educational Programs; *Environmental Influences; *Maladjustment; *Measurement Instruments; Models; Problem Children

ABSTRACT

This report summarizes the mass of information dealing with delinquent and neglected children. The first chapter discusses characteristics that identify neglected and delinquent youth with an emphasis on social and emotional maladjustment. The second chapter reviews cultural and environmental factors related to delinquency. The author investigates the effects of maternal deprivation, institutionalization, and affective neglect in terms of the quality of mothering provided. In the third chapter, the author evaluates 16 instruments used in the diagnosis and assessment of delinquent behaviors. Behavioral modification, behavioral conditioning, interventions within the public schools, and institutional token systems constitute behavioral management treatments applied to neglected and delinquent youth as discussed in Chapter Four. Chapter Five describes current models of educational management, and the final chapter delineates implications and suggestions for work with neglected and delinquent children. (Author/LAA)

ED 086932

Wilkes College EDC

CG

PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY
RISE

TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER.

an EDC report:

Neglected and Delinquent Children

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Neglected and Delinquent Children

by

David A. Sabatino, Ph.D.
Associate Professor of School Psychology
The Pennsylvania State University

EDUCATIONAL DEVELOPMENT CENTER
PENNSYLVANIA DEPARTMENT OF EDUCATION
WILKES COLLEGE
WILKES-BARRE, PENNSYLVANIA 18703

Foreword

Nationally, 195 of each 100,000 children in the 10 to 17 age group are confined in long-term treatment facilities for delinquents. Many have been the attempts to find a solution to the delinquency problem, and huge have been the amounts of financial as well as human resources that have been committed to the cause by federal, state, and private agencies. Yet, in spite of the effort, it seems clear to even the most casual observer that the entire population of delinquent children is tacitly, but quite effectively, ignored by almost everybody.

The Educational Development Center, one of seven operated by the Pennsylvania Department of Education, has been committed as part of a coordinated statewide effort to find and install improved educational programs and practices in state managed institutions for delinquent children. Because the extremely large and diverse amount of literature dealing with delinquency seems to confuse rather than guide the usual practitioner, the first step in the EDC's effort has been to survey and bring together a summary of the mass of available knowledge dealing with delinquency.

This document presents such a summary and is intended to serve as a guide and resource to those whose calling enlists them into the campaign to reduce delinquency and those human misfortunes related to it. It is to those, both students and practitioners, that this document is presented and respectfully dedicated.

Joseph A. Skok, Director
Educational Development Center
Wilkes College

Table of Contents

		Page
CHAPTER I	NEGLECTED AND DELINQUENT YOUTH: IDENTIFYING CHARACTERISTICS	1
	The Juvenile Law in Pennsylvania	1
	Introduction	2
	Who Are Neglected and Delinquent Youth?	3
	Social Maladjustment	6
	Social-Emotional Maladjustment	7
	Types of Social Maladjustment	10
	The Withdrawal-Aggression Continuum	12
	Juvenile Delinquency	14
	Important Considerations in Delinquency	14
	Sex	14
	Age	15
	Social Class	15
	The Family as the Primary Social "Subculture"	16
	Incidence of Social Maladjustment	17
	Social Maladjustment and Other Handicaps	28
	Drug Abuse	40
	References	49
CHAPTER II	A REVIEW OF CULTURAL-ENVIRONMENTAL FACTORS RELATED TO NEGLECTED AND DELINQUENT YOUTH	54
	When Do Neglect and Delinquency Begin?	54
	What is the Cultural Relationship to the Functional Component in Children?	56
	Prenatal Influences	58
	Maternal Deprivation	59
	Institutionalization: Studies on the Effects of Multi-Mothering	64
	Inadequate Mothering: Affective Neglect	70
	References	75

Table of Contents

(CONTINUED)

Page

CHAPTER III DIAGNOSIS AND ASSESSMENT OF DELINQUENT BEHAVIORS 79

Instrumentation 91
The Gluecks' Prediction Tables 92
Bristol Social Adjustment and Prediction Instrument (BSAPI). . . 93
Minnesota Multiphasic Personality Inventory (MMPI). 94
The Kvaraceus Delinquency Proneness Rating Scale and the Kvaraceus Delinquency Proneness Checklist 95
A Two-Step Process for Identifying Emotionally Handicapped Pupils 96
The California Test of Personality: A Profile of Personal and Social Adjustment 98
Washburne Social Adjustment Inventory 99
Scale for Evaluating the School Behavior of Children, Ten to Fifteen 100
Behavior Cards: A Test Interview for Delinquent Children . . . 100
The Hostility and Direction of Hostility Questionnaire (HDHQ) . . 101
The Ego Ideal and Conscience Development Test (EICDT) 102
Walker Problem Behavior Identification Checklist 103
The California Life Goals Evaluation Schedules 103
California Psychological Inventory (CPI) 104
The Hand Test 105
Quay-Peterson Checklist of Problem Behaviors 108

References 114

CHAPTER IV BEHAVIORAL MANAGEMENT OF NEGLECTED AND DELINQUENT YOUTH 117

Interventions Within the Public Schools 118
Behavioral Control and Behavioral Modification 121
Institutional Participation in a Token System 133
Behavioral Conditioning Programs 135
Extending the Institution 144
The Differential Treatment of Delinquent Types 158

References 160

Table of Contents

(CONTINUED)

Page

CHAPTER V CURRENT MODELS OF EDUCATIONAL MANAGEMENT 164

A Psychoeducational Model 166
The Behavior Modification Model 168
The Social Competence Model. 175
An Educational Model. 178
Case Study 181
Results and Conclusions of the Case Study 182
Curriculum. 183
Summary 183

References 188

CHAPTER VI IMPLICATIONS AND SUGGESTIONS FROM THE REVIEW 189

The Question of Neglect 189
The Question of Adequate Statistical/Demographic Data in the Commonwealth 191
Questions on Instructional Implications for Institutionalized Delinquents 191
Implications for the Establishment of Curricula Research Design . 199
A Diagnostic Systems Approach 199
Baseline Data 205
Psychological Reporting 206
A Team Relationship. 207
Validation of the Diagnostic-Prescriptive Teaching Model . 209
Conclusion 220

References 221

Table of Figures

Figure Number	Description	Page
1	Psychosocial Adaptation	9
2	The Model Used to Describe the Information Processing Behaviors	200
3	Psychoeducational Diagnostic Profile	208
4	Initial Prescriptive Teaching Record	210
5	Hypothetical Nonsignificant Interaction Between Two Levels of Sound Blending Ability and Two Alternative Instructional Methods of Teaching Word Recognition	213
6	Hypothetical Significant Interaction Between Two Levels of Sound Blending Ability and Two Alternative Instructional Methods of Teaching Word Recognition	214
7	Hypothetical Significant Interaction Between Two Levels of Sound Blending Ability and Two Alternative Instructional Methods of Teaching Word Recognition	215

Table of Tables

Table Number	Description	Page
1	Behavior Problems Shown by One-Third or More of the Boys and Girls at Each Age Level	19
2	The Prevalence of Some Behavior Characteristics in a Weighted Representative Sample of 482 Children Aged 6 to 12 as Reported by Their Mothers	22
3	Delinquency Rates (1960) by Sex, Race, and Age	24
4	Juvenile Court Delinquency Rates (1960) by Sex, Race, and Income	26
5	Juvenile Court Delinquency Rates (1960) by Sex, Race, and Number of Parents in the Home	27
6	Quay's Checklist of Problem Behaviors Denoting Frequency of Cases Where Agreement Between Teacher, Parent, and Psychologist was Established	34
7	Types of Drug Dependence and Their Characteristics	45
8	Checklist of Problem Behaviors	110
9	Curricula for Neglected and Delinquent Children	184
10	Annual Expenditures and Per Capita Operating Expenditures of Public Institutions for Delinquent Children, by Division and Type of Institution, 1966	192
11	Factorial Treatment of the Twenty-Five Variables for Both Subject Groups	203
12	Five Principal Components Obtained by Orthogonal Factorial Rotation of the Twenty-Five Variables	204
13	Experimental Design of the Two-Phase Study to Determine the Learning Efficiency of Mentally Retarded Children Using Auditory and Visual Perceptual Methods	219

Chapter I

Neglected and Delinquent Youth: Identifying Characteristics

The Juvenile Law in Pennsylvania

Proceedings may be instituted in Juvenile Court on Petition of any citizen of the county or upon commitment by any magistrate of a child arrested for any indictable offense except murder, or for the violation of any other law of the Commonwealth or the ordinance of any city, borough, or township. There shall be no preliminary hearing in any case affecting a dependent, neglected, or delinquent child. No child under 16 years of age shall be kept in any jail, police station, or any institution where adults are confined, either before or after hearing in Juvenile Court, nor shall they be transported in a vehicle with adult criminals. No dependent, neglected, or delinquent child shall be permitted in court during criminal trials unless as a witness.

The word "child," as used in this act, means a minor under the age of 18 years.

The word "adult," as used in this act, means any person over the age of a child as defined and limited by this act.

The words "delinquent child" include:

(a) A child who has violated any law of the Commonwealth or ordinance of any city, borough, or township;

(b) A child who, by reason of being wayward or habitually disobedient, is uncontrolled by his or her parent, guardian, custodian, or legal representative;

(c) A child who is habitually truant from school or home;

(d) A child who habitually so deports himself or herself as to injure or endanger the morals or health of himself, herself, or others.

The words "neglected child" include:

(a) A child who is abandoned by his or her parent, guardian, custodian, or legal representative;

(b) A child who lacks proper parental care by reason of the fault or habits of his or her parent, guardian, custodian, or legal representative;

(c) A child whose parent, guardian, custodian, or legal representative neglects or refuses to provide proper or necessary subsistence, education, medical or surgical care, or other care necessary for his or her health, morals, or well-being;

(d) A child whose parent, guardian, custodian, or legal representative neglects or refuses to provide the special care made necessary by his or her mental condition;

(e) A child who is found in a disreputable place or associates with vagrant, vicious, or immoral persons;

(f) A child who engages in an occupation or in a situation dangerous to life or limb or injurious to the health or morals of himself, herself, or others.

The words "dependent child" include:

(a) A child who is homeless or destitute without proper support or care through no fault of his or her parent, guardian, custodian, or legal representative;

(b) A child who lacks proper care by reason of the mental or physical condition of the parent, guardian, custodian, or legal representative.

[1933 June 2, P. L. 1433, Sec. 1.]

Introduction

In this chapter the neglected and delinquent child will be viewed in two ways. First, he will be viewed as a member of and responding to a society or peer group; and secondly, he will be viewed as a person alienated from a given culture and possessing certain observable traits and characteristics. In our discussion an attempt will be made to distinguish between the socially and the emotionally maladjusted.

The reader should be made aware of the problem that exists in the professional literature on delinquency and neglect. Sociological studies, on the one hand, frequently attempt to describe groups, their collective behaviors, and their responses to a distinctive environment or the general cultural setting; but, group characteristics are seldom

generalizable to any specific individual. Psychological studies, on the other hand, tend to deal with individuals and be of little predictive value. Further, one may find himself in a quandary pondering the relationships between neglected and delinquent youth. The literature is rich in providing materials on causes, conditions, and characteristics of delinquency; there are few reports on neglect.

Who Are Neglected and Delinquent Youth?

Neglect is a term that has both legal and human implications. The laws of most states cite neglect as one of the three major contributors necessary for initial investigative and/or judicial action against parents or guardians. Neglect, as well as incorrigibility, and delinquency are used as criteria in most legal codes regarding the management of children and their conduct. Neglect is the term most frequently found in affidavits charging parents with failure to discharge their duty responsibly.

The physical component of neglect is not hard to substantiate in court: a child is malnourished, sick, ill clothed--generally in a miserable physical state. But the emotional component of neglect, to which legal codes in many states refer, is difficult to establish, even though we know that it is prevalent in families at all socioeconomic "levels." Emotional neglect typically reflects on the quality of the parent-child relationship, but a host of factors--such as religion, ethnic background, race, values, beliefs, and the immediate conditions of the larger society, as well as the respective home--are also involved in it. Black urban, rural Appalachian, and native American cultures and subcultures are distinctly different, and their differences are magnified in child-rearing practices. A Navajo family may walk twenty miles to a package liquor store where children will be front-row observers as mother and father drink to intoxication. For this particular culture, however, this does not constitute "neglect," leading possibly to

delinquency as it might for others. Rather, it is at this time an established cultural expectation of regular occurrence; one consequence is that it is likely to reproduce itself in the next generation.

One may find dogmatic statements in the literature on delinquency. Reckless (1967), for example, has stated that children from the same home, living in an urban renewal area in a major city, who share similar physical and possibly emotional experiences, have an equal chance of becoming criminals or law enforcement officials. The fact is, however, that we do not presently possess comprehensive knowledge of the causes of delinquency or neglect or any good notion why particular children in given families respond negatively to the child-rearing practices and attitudes they experience in homes or institutional placement. Certainly, there is no single theory which offers the answer. A patchwork of theories do exist. These include:

1) Genetic Transmission Theories. Early naturistic criminologists believed in inherited criminality or degeneracy, contending that behavior is biologically determined. This idea held for two decades and implied that physical structure dictated social functioning.

2) Bad Parents. Most criminologists have attributed delinquency to lack of parental guidance and discipline. They point out that increases in broken homes parallel the rise in delinquency.

3) The Bad Boy Theory. The antithesis of the "bad parent" theory is the "bad boy" theory which states that delinquency begins in the child's ear--"You are a bad boy." But children tend to role play within the expectations of their parents or friends. If told they are bad, punished frequently, and provided positive reinforcement for certain acts, they may incorporate such a view of self and attempt to actualize the role placed upon them.

4) The Defective Parent-Child Relationship. This is the "generation gap" concept which states that the parents (adults

over 30) just do not understand the clothes, music, dances, or even the vocabulary of the now generation. The insistence from both of these groups that a real difference exists in nature only amplifies the tendencies of one or the other group to actually be different. Communication, its absence or difficulty, is the "whipping boy" in this theory.

5) The School's Fault Theory. This theory emphasizes the school's dominant role in the life of children as society moves from a primary social system centering on the home to a community-based urban setting. The school is considered as having failed to communicate appropriate values to children. "Grades" not "honesty" are said to have been emphasized as an example of the loss in real human values.

6) The Economic Pressure Theory. Since most neglected and delinquent children are black, from the inner city, or both, their delinquency is seen as being directly related to poverty, housing, and associated family conditions.

7) The Delinquent Gang Theory. This theory emphasizes association with "bad boys" since "evil communications corrupt good manners." The argument is that social values of the gang serve to unbalance and replace the value structures of the larger society which the subgroup feels are not applicable to the cultural settings where the gang operates.

8) The Mental Illness Theory. This theory holds that all who are neglected or neglect others must suffer from psychopathology. There is a widely held belief that delinquents are emotionally maladjusted and need psychotherapy.

9) The Asocial Theory. This theory holds the position that some children simply do not learn appropriate values and the mores congruent with society; they live for and value what is appropriate or expedient for the moment.

10) There are other theories stressing inadequate recreation facilities, physical weakness, underdeveloped expressive vocabularies resulting in physical aggression (Billy Budd Syndrome), hostility toward an alien culture, rejection by parents or the home for a multitude of reasons, and the message of crime and violence conveyed through mass media, for example, television.

Social Maladjustment

Central to an understanding of neglect or delinquency is recognition of a child's specific problem or disability. Awareness that he has a definitive handicap, chronic illness, or some acute problem that needs attention will help us both to understand and to obtain services for him. It is very difficult in studying social maladjustment, however, to determine whether genuine differences exist among the "originally maladjusted" children who exhibit "normal" adjustment problems. The hostility, aggressiveness, or withdrawn behavior a child may exhibit might rightly or even necessarily be considered part of his "normal" adjustment processes. Normal adjustments to life can require children to react in a manner magnified out of proportion according to the standard of the so-called "normal" adult world.

Any situation which is threat producing to a child poses a danger to his physical or emotional well-being. Emotional neglect, multiple mothering, and parental rejection are stressful to most children and may be threatening. A child, for example, facing institutionalization may fear separation from his mother. His fear here may attack his other emotional supporting structures, such as feelings of security at home, his personal identity, and his feelings of belonging. His emotional reactions as themselves are adjustment processes. Adjustment implies that a child is interacting in a satisfactory manner with a particular environment or environmental situation in which he finds himself. Within

a given period of time, all of us adjust or readjust to constant environmental changes. For the majority of children, maladjustment is a temporary process which will pass with the time that it takes to remove the threat and residual anxiety.

The rules which govern behavior in our society sometimes provide situations in which a person may exhibit anger, fear, affective warmth, or hostility and still be seen as showing normal adaptive mechanisms. A soldier may display extreme emotionality under wartime conditions and still be considered as demonstrating normal behavior. However, the same reaction by the same man in a peacetime office where the stress might be equally as great would be considered evidence of maladaptive behavior under society's rules.

Social-Emotional Maladjustment

Two distinct concepts are usually implied by the terms emotional and social maladjustment. One may distinguish social from emotional maladjustment by examining the interaction of the individual under stress.

Basically, an emotionally maladjusted child lives with total disregard for most social-environmental situational interactions. Such a child's responses to a given social situation are impaired by faulty adjustment mechanisms which result in extremes of overt behavior ranging from aggressive destruction of self or others to total withdrawal from people and things. Emotional maladjustment is neither temporal nor related to the immediate situation or environment.

Social adjustment or maladjustment, on the other hand, tends to be dependent upon, or interrelated with, the context of the immediate environment. It is generally regarded as emerging over difficulties in interpreting societal rules or the inability or unwillingness to adapt to particular environmental situations. Socially maladjusted children show behaviors such as aggressiveness, withdrawal, and other behaviors which may be reinforced by their securing attention. Common examples

of social maladjustment are seen in delinquent acts committed by juveniles. Pate (1963) describes social maladjustment as follows:

> Socially maladjusted children are chronic juvenile offenders who regularly disregard broader social values and rules as a matter of course, substituting in their stead the values and rules of their peer group. They make up delinquent gangs who are constantly in trouble with the law. Their accepted code of conduct is truancy, fighting, and defiance against constituted authority. Socially maladjusted children are handicapped by their provincial patterns of social values . . . (p. 240).

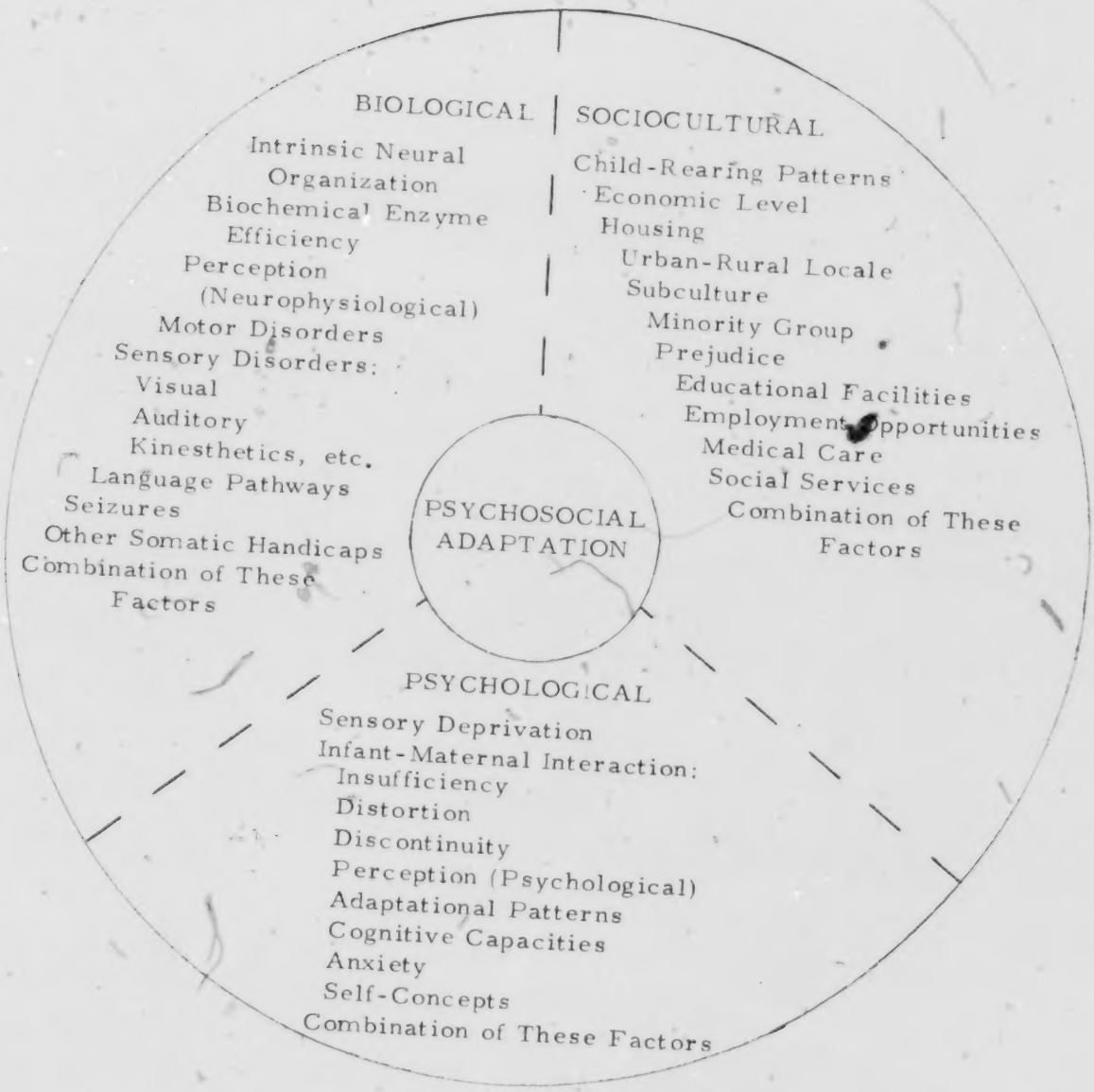
One must be aware of the fact that psychosocial adaptation of a given individual to his environment represents a total adjustment process; that is, each person is determined by how well he thinks he feels, what is happening in his immediate family and vocational life, as well as his ability to use psychological adjustment mechanisms. Equally important, overt behavior does not always give a true picture of personal state; pseudo-adjustment phenomena are real. An individual may present a state of good adjustment when, in fact, he is troubled. Prevalent is the substitution by the child of socially acceptable physical symptoms, selected from established patterns of illness, as a means of expressing his problems, for feelings the child senses he cannot otherwise express. The hidden problems are much more serious than the overt behavior symptoms.

It seems necessary to develop systematic ways of looking at human adjustment and/or how each aspect interacts to promote or inhibit that process. One may look at psychosocial adjustment as being influenced by biological, sociocultural, and psychological concerns. (See Figure I.)

The adaptation of man to his environment is dependent upon a variety of identifiable features or variables. The biological factor includes how his body performs, absence or presence of physical pain, sensory functioning. Biological fact is basic to man's view of self and of the world. But it is the total interaction of all factors--the biological, sociocultural, and psychological--which form the complex whole involved in adaptation. Not all children want to be football players, but some do

FIGURE 1

PSYCHOSOCIAL ADAPTATION



From: J. B. Richmond, "Introduction," Mental Retardation: A Handbook for the Primary Physician, p. xiv, 1964. Reproduced with the permission of the Journal of the American Medical Association.

because of a desire for the social recognition football players receive. Physically a boy may not have the size or endurance to play football, and he must then either adapt or enter a nonadjusted phase of living. The type of environment in which he grows up and the abilities he has or lacks render him more or less adjusted.

Similarly, a high school senior girl who wants to be a nurse may have been reared in a setting which gave her limited opportunities to develop her vocabulary. She may have entered school with relatively underdeveloped speech and language facility, and she may have been a poor reader and disliked school. Her academic progress in the grades may have suffered to the extent as to deprive her of the opportunity to take algebra, physics, and chemistry when she entered high school; as a senior, her applications for nurse's training are rejected. Again, the result is due to biological, sociocultural, and psychological variables acting together. As a consequence the girl, 18 years of age, must now readjust her dream and expectations for life or suffer continuing frustrations. Whether she can modify her expectations and accept the lower status of nurse's aide, working in the hospital kitchen, or successfully working toward other goals will depend upon the strength and balance of her psychosocial adaptive mechanisms.

Types of Social Maladjustment

Three major types of social maladjustment are generally defined--in relation to social values--as asocial, dysocial, or antisocial.

Asocial implies being without knowledge of social rules or morals. An example may be given in the case of a five-year-old child who was brought to a hospital outpatient clinic for a preschool examination. He has little language except grunts and gestures. His overt behavior is filled with gross, aggressive acts of hitting, biting, and kicking. His social adjustment is comparable to the "negativism" characteristic of a two-year-old, yet he shows normal intelligence on commonly used

nonverbal intelligence tests. The case history shows that he has been in seven different homes, has had multiple mothering, and never knew his father. Not surprisingly, he does not know how to act appropriately; he has not internalized societal rules, not even those normally in the repertoire of a five-year-old child.

In the dysocial type of maladjustment, a person is presented with conflicting events or positions reflecting important social values. As a child he has learned that rules are not to be broken; for example, he should never steal from others. Upon entrance into school, he may find that children from other homes steal, and they have regard for one conduct rule only--it is wrong to be caught. The child in question is now confronted with dysocial values; that is, two opposing views which seemingly apply to the same social situation.

The third type, the antisocial condition, characterizes the public's view of most delinquents who are brought to the attention of the court. The antisocial youth has indeed learned values consistent with those taught by society. But as a result of gang or personal pressure, he violates those values and thus comes into confrontation with society's norms and the law.

Two other diagnostic categories associated with social disability are character disorders and transient situational personality disorders.

Character disorders are manifested as habitual types of behaviors which draw unfavorable attention to the person. They are not the result of either mental retardation or psychopathology; the person is not mentally disturbed. Character disorders may simply be described as an individual's possession of some behavioral characteristic that disturbs others. An example is the child described as having a "mean streak"; he bullies smaller children. He does not have a mental disorder in the sense that his behavior is driven by neurotic anxieties or that he is psychotic. He likes to boss, direct, and influence weak and smaller

children, perhaps because he cannot express this need for dominance with children his own age.

The following example distinguishes the character disorder from the psychopathological personality disorder. One child expresses aggressive, hostile behavior in a socially disapproved manner by bullying smaller children. Another child tends to withdraw, unable to express his frustrations and hostility openly, and displays such behavior as building and lighting fires in homes. The former displays a character disorder while the latter exhibits a more serious personality disorder.

There is a large gray area between the child who recognizes that he should not "pick on" children smaller than he, and the withdrawn child whose anxiety causes him to express feelings and impulses that he cannot explain and seemingly has no power to control.

Between the character disorder and acute personality disorder is the area of transient situational personality disorder. It falls under the heading of social maladjustment and not emotional maladjustment because of its transient nature. The most important characteristic of the transient situational personality disorder is that while the child frequently displays the more severe manifestation associated with neurotic anxieties, the resulting overt behaviors that he displays can be explained in rational terms by the child and understood when sufficient information is presented.

The Withdrawal-Aggression Continuum

A first step in the management of a child's reaction to a stressful situation (for example, being separated from his mother) is to isolate the triggering mechanism. Once this is understood by both the nurse and the child, a relationship may be established that will reduce the stresses and negative emotion involved and promote a sense of security which will help the child to deal with other stresses. If this does not happen, the child's disturbed behavior will continue and the situation may eventually produce

the kinds of maladjusted responses frequently associated with passive-aggressive and passive-withdrawn personality disorders.

The child with a passive-aggressive personality disorder suffers from repeated anxiety attacks which, for the most part, are well controlled; but, he can only defend himself against his anxiety by seeking a more passive state which contrasts with the aggressive behavior he displays when his anxieties become too strong. To offset a further buildup of anxiety, he finds an outlet for his frustrations. Perhaps he breaks a window in the presence of the school principal--for no apparent reason--or hits a child twice his size in the restroom after recess. In the hospital he may be the perfect patient for three days; the afternoon before he is to return to a stress-filled home, he must react. He seems tense, though still able to talk about his problems; then suddenly he becomes violently aggressive, apparently fully expecting and apparently wanting punishment for the aggression.

Such behaviors are caused in part by this child's inability to understand and isolate his anxiety-inducing problems, which are real and have a situational base. At the same time, he has foreboding fears of other anxieties building up which may not have any basis in reality. This combination results in the transient changing of behavior from a passive state to an overt-withdrawn or overt-aggressive state.

Children with such problems draw attention to themselves in schools, hospitals, and society most of the time. It is difficult to generalize about the etiology of their condition, but some of the more common reasons are rejection by parents, inability to meet parental expectancy, fears promoted by unsuccessful social interaction, academic or athletic failure, and fears instilled by peers or parents. The taxing dilemma for treatment of such a child is his simultaneous need for acceptance, punishment, and a concrete existence, which he understands, to consistently guide and structure his life's decisions.

Juvenile Delinquency

One of the major categories of social disability is juvenile delinquency. This is so closely linked to sociocultural problems that delinquency appears most frequently in areas where there is poverty, adult crime, or a constellation of community conditions that are grouped under the names of anomie or social disorganization. Susceptibility to influences of the physical environment, intellectual level, and family background interact and affect a person's leaning toward delinquency or conformity. Research on the delinquent, his social group, and his community indicates that sociological and psychological factors, personality, and social pressures are all determinants of delinquency behavior.

Quay (1965), focusing on the "legal sense" of the term, defines delinquency as follows:

> The delinquent is a person whose misbehavior is a relatively serious legal offense, which is inappropriate to this level of development; is not committed as a result of extremely low intellect, intracranial organic pathology, or severe mental or metabolic dysfunction; and is alien to the culture in which he has been reared. Whether or not the individual is apprehended or legally adjudicated is not crucial [p. 12].

Delinquency, of course, is a form of misbehavior, but not all misbehavior is delinquency, even when it is inappropriate for the age of the individual. Both the quality of the behavior and the degree of social deviance are factors in judging an antisocial act appropriately.

Important Considerations in Delinquency

Sex. In most western countries, the ratio of male to female delinquents is about six to one; in some countries, it is ten to one. Parsons (1967) holds that this ratio is the most illustrative indication of societies' different standards for the sexes. A society might look favorably on a male who takes a "joy ride" in a stolen car. His adventure

may be regarded as an assertion of masculinity; the same behavior by a woman would be frowned upon since obedience and gentle behavior are expected from them. Something similar may be true of boys' feelings toward their mother at puberty. The stronger the mother's control, the stronger the act of breaking it. In families of low socioeconomic status, when the father image is weak or even absent, relatively many crimes are committed by adolescent children. But the crimes committed by girls in this situation are generally quite different from those of boys.

Age. The age at which an individual performs his first deviant act is very important. Glueck and Glueck (1956) found that, on the whole, if the acts of delinquency begin very early in life, they are abandoned at relatively early stages of adulthood. Conversely, if such acts begin later, they may be abandoned, provided the natural processes of maturation are not interfered with by a treatment agency, school, parent, or community.

In most western countries, mean age in delinquency is decreasing. In industrial countries, rate of crime by adults is going down; crime by juveniles is going up. The incidence of delinquency is generally highest during early adolescence; a mean age of 14 years is found in many countries. By age 21, the amount of criminal activity decreases quite substantially; however, severity of the crimes usually increases with age.

Social Class. The social class to which a person belongs, as well as the culture, influences what he learns to accept as correct norms for him to observe. Cohen (1965) writes: "What we see when we look at the delinquent subcultures . . . is that it is nonutilitarian, malicious, and negative [p. 25]." It is defined by its "negative polarity" to the norms of "respectable society." In delinquent subcultures, behavioral norms and values are at variance with those of the culture at large. The delinquent's conduct is normal by the values of his subculture, but wrong according to the larger culture.

The Family as the Primary Social "Subculture"

The home is the primary subcultural environment in which the parents establish tone and conditions and, to a large extent, shape their children's behavior. Yet a child's interaction with parents and immediate environment always remains at an individual level. Though their environment might be conducive to producing "delinquent children," one can only discuss a particular "delinquent child" in the light of the particular events that have interacted to produce the behavior which society sees as inappropriate. And in speaking about a particular individual and his delinquency, precise observations must be made in reference to the causative factors, time events, and place of his delinquency behavior.

Delinquency studies in high-risk neighborhoods in various cities have sometimes found that even brothers in the same family may differ considerably in regards to their respect for social values. It may happen that a policeman, a minister, and a criminal come from the same family. The obvious fact is that no two people are alike genetically nor respond to their environment in like ways. Even if it were possible to create an ideal environment in home and school, it would not be so for more than one person. The mother who works to treat all her children alike, denying one a birthday party because his brother does not want one, has not treated her children as individuals. She may have denied one the very consideration that would have promoted his social growth. On the other hand, to force both brothers to have birthday parties would be just as inequitable, especially if one brother were as socially retiring as the other was socially outgoing.

Family breakdowns are occurring in our society with increasing regularity as evidenced by rising divorce rates, changes in role relationships among family members, and the social disorganization that accompanies advancing urbanization. Delinquency is also increasing steadily, which may suggest a relationship of the above factors to both

family stability and the social adjustment of children. Except for orientals and blacks, delinquency occurs about twice as frequently among the children of immigrants as among those of native-born parents (Conger & Miller, 1966). Parental prestige, the foreign language factor, and the change from a simple rural to a complex urban environment are all contributing factors. First-generation parents may themselves have difficulty adapting to the new environment. Parental inability to guide their children, due to their own limited experience in a new cultural setting, may contribute to role model deficiencies. Our middle-class culture frequently restricts boys from lower classes in the achievement of material possession. In considering this matter, Cloward and Ohlin (1960) noted that delinquents repeatedly wanted "big cars," "flashy clothes," and "swell dames."

> These symbols of success, framed primarily in economic terms rather than in terms of middle-class life styles, suggest . . . that the participants in delinquency subcultures are seeking higher status within their own cultural milieu. If legitimate paths to higher status become restricted, then the delinquent subculture provides alternative avenues . . . [p. 96].

Other studies have shown delinquents to be either highly motivated to obtain material possessions and comforts (Cartwright, Howard, & Short, 1966) or frustrated by a lack of economic and social status. They cite the emphasis upon gang membership among lower-class youths as one way of meeting the needs for feelings of personal worth and peer acceptance to overcome what they feel are deficiencies in material possessions and social position.

Incidence of Social Maladjustment

The purpose of examining delinquency in some detail was to acquaint the reader with the factors that are associated with it. However, there are many socially troubled youths who do not violate society's values but whose problems interfere with their own adjustment.

In 1954, MacFarlane, Allen, and Honzik reported data collected longitudinally since 1929 on 252 children who were part of the Berkeley survey. The survey drew its sample from one of every three children born between January 1, 1928, and June 30, 1929. Eighty-six children were available for study in their fourteenth year, enabling the investigators to sample forty-six possible problem areas. The results showed that problems of speech, elimination of fears, thumbsucking, overactivity, destructiveness, and temper declined with age. Nailbiting was the only problem to increase with age, subsiding by age 14. Problems such as insufficient appetite and lying rose to a peak and then subsided. Several problem areas showed a twin peaking effect, one occurring at the time of school entrance and the other at adolescence. These were evidently situational problems likely to appear when a child is under stress. Included in this group are restless sleep, disturbing dreams, physical timidity, irritability, attention demanding, overdependence, somberness, and jealousy. Table 1 shows the areas of problem behaviors occurring for one-third or more of the boys and girls at each age level.

The only problem which had no evident relationship to age was that of oversensitivity, which persisted in girls throughout the years of the study but dropped dramatically in boys after age 11. Oversensitivity is an observable behavior, frequently displayed as a reaction to a fear such as that of meeting expectancy (measuring up to what others think). The early adolescent girl may fear social situations such as parties, etc., because she has facial acne; or she may have too timid a voice to receive a part in the junior play.

Another major finding in this study was the differing patterns in sibling birth order. First-born boys were more withdrawn and tended to internalize their problem much more than those occupying another position in the birth order. Younger children were seen to be more aggressive and competitive than their older siblings. First-born girls

TABLE I

BEHAVIOR PROBLEMS SHOWN BY ONE-THIRD OR MORE OF THE BOYS AND GIRLS AT EACH AGE LEVEL

		Age													
		1 3/4	3	3 1/2	4	5	6	7	8	9	10	11	12	13	14
Enuresis (diurnal & nocturnal)	B	+													
	G	+													
Soiling	B														
	G														
Disturbing Dreams	B										+				
	G						+				+	+			
Restless Sleep	B	+													
	G														
Insufficient Appetite	B														
	G						+								
Food Finickiness	B		+												
	G	+	+	+			+								
Excessive Modesty	B														
	G														
Nailbiting	B													+	+
	G									+		+			
Thumbsucking	B														
	G	+	+												
Overactivity	B		+	+	+	+		+	+	+					
	G		+	+	+	+									
Speech	B														
	G														
Lying	B			+	+	+	+		+						
	G			+	+	+	+								
Destructiveness	B														
	G														
Overdependence	B														
	G														
Attention Demanding	B														
	G														

TABLE 1 (continued)

BEHAVIOR PROBLEMS SHOWN BY ONE-THIRD OR MORE OF THE BOYS AND GIRLS AT EACH AGE LEVEL

		Age													
		1 3/4	3	3 1/2	4	5	6	7	8	9	10	11	12	13	14
Oversensitiveness	B			+	+	+		+	+	+	+	+	+		
	G			+	+	+	+	+	+	+	+	+	+	+	+
Physical Timidity	B														
	G			+		+									
Specific Fears	B		+	+	+	+	+	+	+	+		+			
	G	+	+	+	+	+	+	+	+			+			
Mood Swings *	B										+	+		+	
	G							-	-	-		+			
Shyness *	B	-	-	-	-	-	-	-							
	G											+			
Somberness	B					+									
	G						+								
Negativism	B			+		+									
	G				+										
Irritability	B														
	G														
Temper	B	+	+	+	+	+	+	+	+	+	+	+	+	+	
	G	+	+	+	+	+	+	+				+			
Jealousy	B					+			+	+	+	+	+	+	
	G			+		+		+			+				
Excessive Reserve *	B	-	-	-	-	+						+	+		
	G					+	+	+	+	+	+	+	+		+

* - Data not obtained.

From: MacFarlane, Allen, & Honzik, 1954, p. 155. Reproduced with permission.

appeared to have more problems and difficulty in coping with stress situations. Of all the findings presented by MacFarlane, et al. (1954), the most important one was that most problem behaviors did not persist throughout the age range. Children seem to enter periods when several problems are manifest, around 5 to 7 years of age, subsiding by 11 to 12. The most frequently occurring problems were overdependence, somberness, and irritability, all of which tend to begin and end between the ages of 5 and 14. The authors concluded with a rather concise statement:

> May we pay our respect to the adaptive capacity of the human organism, born in a very unfinished and singular dependent state into a highly complex and not too sensible world. Unless handicapped by inadequate structure and health, and impossible and capricious learning situations, he treads his way to some measure of stable and characteristic patterning . . . [p. 154].

Another study of maladjustment (Lapouse & Monk, 1959) used the survey technique to study a sample of 482 children between 6 and 12 years of age by interviewing mothers in their homes in Buffalo, New York. They found more intense and higher incidences of worries and fears in lower socioeconomic children, younger children, and blacks. An examination of the characteristics covered by the survey suggests that most of the concerns manifested by children could be considered normal.

Children live under many stress situations, a stress situation being defined as one that denies comfort and tends to promote threat. A trip to the family physician may be a pleasant visit for an adult, but for the child it may produce fears and worries that result in many inappropriate and attention-getting behaviors. The overt behaviors listed in Table 2 may not have clear direct relationships with the real fears or worries that may produce them. They may be only symptomatic representations of the child's real problems, or no problem at all. Child A may bite his fingernails to alleviate anxiety produced from the fear of failing to achieve his parents' expectancies. Child B may bite his fingernails to

TABLE 2

THE PREVALENCE OF SOME BEHAVIOR CHARACTERISTICS IN A WEIGHTED REPRESENTATIVE SAMPLE OF 482 CHILDREN AGED 6 TO 12 AS REPORTED BY THEIR MOTHERS

		Percent
1.	Fears and worries, seven or more present	43
2.	Bedwetting within the past year	
	all frequencies	17
	once a month or more	8
3.	Nightmares	28
4.	Food intake	
	less than "normal"	20
	more than "normal"	16
5.	Temper loss	
	once a month or more	80
	twice a week or more	48
	once a day or more	11
6.	Overactivity	49
7.	Restlessness	30
8.	Stuttering	4
9.	Unusual movements, twitching, or jerking (tics)	12
10.	Biting nails	
	all intensities	27
	nails bitten down (more severe)	17
11.	Grinding teeth	14
12.	Sucking thumb or fingers	
	all frequencies	10
	"almost all the time"	2
13.	Biting, sucking, or chewing clothing or other objects	16
14.	Picking nose	26
15.	Picking sores	16
16.	Chewing or sucking lips or tongue or biting inside of mouth	11

From: Copyright, The American Orthopsychiatric Association, Inc. Reproduced with permission.

remove irritating dirt. Fingernail biting is a symptom; the point is, a symptom of what?

The relativity of problem behaviors, or at least troublesome behaviors or misbehaviors, is reflected in Zeitlein's (1957) report that as high as 41% of the entire student age school population was cited once or more for misbehaving during the school year. Of the misbehaviors reported, 82% involved problems of disturbance, disobedience, and disrespect. Boys were more frequent offenders than girls. It was also reported in this study that children from higher socioeconomic homes, with higher IQ's, did better academically in school, and children with greater popularity were better adjusted than children who lacked these attributes.

Incidents of problems in delinquent youth were reported in a study by Eisner (1969). He analyzed data from San Francisco, dividing the children according to several variables. Making separate tabulations for boys and girls found in other studies, boys showed delinquent behaviors averaging six times higher than girls. The ratio varied in different city census tracts, the lowest ratio being 3½ to 1. In one San Francisco census tract, the boys' rate was nine times that of the girls.

Dividing the individual groups of boys and girls by race and age and comparing four age divisions among the five groups, the author viewed the problems of delinquency for each sex and race at each age. (See Table 3.)

The data in Table 3 indicate that delinquency rates varied considerably with race. The lowest delinquency rates for both boys and girls were among Chinese, a fact that was true at all ages except for the very youngest boys (eight to ten years old). In order of increasing delinquency rates, the racial breakdown showed a progression from Chinese to white, "other" white-Spanish, and black. The highest rates for both sexes at all ages were for blacks.

TABLE 3

DELINQUENCY RATES (1960) BY SEX, RACE, AND AGE

	MALES (age in years)				FEMALES (age in years)			
INTERACTIONS	8-10	11-13	14-16	17	8-10	11-13	14-16	17
All Interactions:								
White	10	47	167	210	1	6	28	27
White-Spanish	18	62	251	444	2	9	36	33
Negro	35	146	381	575	5	39	86	60
Chinese	8	26	54	72	0	1	10	3
Other	3	82	189	310	0	20	54	46
Juvenile Court Cases:								
White	8	33	84	86	0	6	22	10
White-Spanish	13	36	99	173	2	9	31	13
Negro	29	118	252	295	5	37	78	36
Chinese	5	20	40	46	0	1	10	3
Other	2	67	124	184	0	18	49	22

From: Eisner, The Delinquency Label, 1969, p. 35.
Reproduced with permission.

TABLE 3

DELINQUENCY RATES (1960) BY SEX, RACE, AND AGE

INTERACTIONS	MALES (age in years)				FEMALES (age in years)			
	8-10	11-13	14-16	17	8-10	11-13	14-16	17
All Interactions:								
White	10	47	167	210	1	6	28	27
White-Spanish	18	62	251	444	2	9	36	33
Negro	35	146	381	575	5	39	86	60
Chinese	8	26	54	72	0	1	10	3
Other	3	82	189	310	0	20	54	46
Juvenile Court Cases:								
White	8	33	84	86	0	6	22	10
White-Spanish	13	36	99	173	2	9	31	13
Negro	29	118	252	295	5	37	78	36
Chinese	5	20	40	46	0	1	10	3
Other	2	67	124	184	0	18	49	22

From: Eisner, The Delinquency Label, 1969, p. 35.
Reproduced with permission.

The black group displayed rates about two and one-half to three and one-half times as high as the average Chinese. Seventeen-year-old blacks, in fact, had an average delinquency rate of 575 per 1,000; over half were either warned by the police or sent to juvenile court in the course of a year. The rate of juvenile court citations for the black group as a whole was 295 to 1,000.

Table 4 represents the number of delinquents by race, sex, and family income. Unexpectedly, the highest numbers did not appear in the lowest income groups except for black girls. Girls of all the other races, and white, white-Spanish, and "other" boys were in maximum family annual income levels between $2,500 and $5,000. The highest number of delinquents were black and Chinese boys whose parents were in the $5,000 to $10,000 annual income bracket. The findings that maximum numbers of delinquents were in middle-income groups were true for this study and do not agree with many studies which frequently report most delinquents to come from the lower-income groups.

Table 5 takes into account the number of parents in the home. The preliminary results showed that the number of parents in the home was a factor that affected delinquency labeling. However, the study of this factor did not produce consistent effects. The presence of two parents in the home was associated with low delinquency rates. The highest rates were found when there was only one parent; but there were exceptions in the case of Chinese girls and "other" girls. However, the pattern seems clear. Juveniles who have no parents in their homes have delinquency rates slightly above those who have both parents. Older children with delinquency rates were also more likely to come from broken families.

Eisner (1969) contended that both the definition and statistics of delinquency need overhauling. The common statistic that 4% of the ten- to seventeen-year-old group are apprehended by policemen in a year is misleading.

TABLE 4

JUVENILE COURT DELINQUENCY RATES (1960) BY SEX, RACE, AND INCOME

Race	MALES				FEMALES			
	0-$2,500	$2,500-$5,000	$5,000-$10,000	Over $10,000	0-$2,500	$2,500-$5,000	$5,000-$10,000	Over $10,000
White	20	70	20	3	8	19	3	0
White-Spanish	18	62	11	2	9	13	3	0
Negro	81	104	121	3	30	22	9	0
Chinese	3	11	14	2	0	2	2	0
Other	6	63	21	0	12	18	4	0

From: Eisner, The Delinquency Label, 1969, p. 37.
Reproduced with permission.

TABLE 4

JUVENILE COURT DELINQUENCY RATES (1960) BY SEX, RACE, AND INCOME

	MALES				FEMALES			
Race	0-$2,500	$2,500-$5,000	$5,000-$10,000	Over $10,000	0-$2,500	$2,500-$5,000	$5,000-$10,000	Over $10,000
White	20	70	20	3	8	19	3	0
White-Spanish	18	62	11	2	9	13	3	0
Negro	81	104	121	3	30	22	9	0
Chinese	3	11	14	2	0	2	2	0
Other	6	63	21	0	12	18	4	0

From: Eisner, The Delinquency Label, 1969, p. 37.
Reproduced with permission.

TABLE 5

JUVENILE COURT DELINQUENCY RATES (1960) BY SEX, RACE, AND NUMBER OF PARENTS IN THE HOME

	MALES			FEMALES		
	Number of Parents			Number of Parents		
Race	2	1	0	2	1	0
White	20	65	23	3	18	10
White-Spanish	19	64	28	5	15	6
Negro	44	100	47	11	31	14
Chinese	9	15	22	1	3	0
Other	27	34	35	10	9	14

From: Eisner, The Delinquency Label, 1969, p. 38.
Reproduced with permission.

> The delinquency rates of high-risk groups are sufficient, I believe, to force a complete reevaluation of the usual concept that delinquents are deviants, that is, that they differ in their attributes from the "normal" boys of the community. If three out of four 17-year-old Negro boys in two large districts of San Francisco are recorded as delinquent in the course of a year, I submit that the deviant in this group is the one boy in four who does not become delinquent. But if delinquency is not due to deviant members of the group, one is driven to the conclusion that the entire group, at least by police standards, must live a life that is opposed by the rest of the community. We should speak of deviant groups, not deviant individuals. The delinquent in this group is the normal member of his society. Psychotherapy will not cure his delinquency; and a cure of delinquency will not help him to get along in his society--indeed, it may very well alienate him from his friends and associates [p. 43].

The citizenry of the great middle-class culture have many status needs, but they frequently fail to recognize the status needs of delinquent youth who reside in different subcultures. There is no general society for them; the society we know is the particular subculture in which we live. Why, then, do we repeatedly ask others to join our society when we fail to understand theirs?

Social Maladjustment and Other Handicaps

Earlier in this chapter the discussion of delinquency was related to all types of social, family, and economic conditions. In the discussion, however, we did not relate delinquency to other handicaps, as few studies have been conducted to interrelate the variable of social disability and other handicaps.

Children with social maladjustments are generally thought to have normal mental and physical capabilities. Some are handicapped, however, encompassed by social maladjustment and additionally by other physical or mental deficits. However, a child handicapped with a social maladjustment is not usually considered multihandicapped because the social disorder is secondary to the primary mental or physical handicap.

A primary handicap is used to describe a child with a disability or handicap unrelated to any other handicap. The social maladjustment is an overlay to the primary mental or physical handicap and is considered a secondary handicap. It is important that the nurse make a distinction between secondary, primary, and social maladjustments evidenced by the handicapped child if she is to provide realistic care. An eight-year-old child may become difficult to manage upon admission to the hospital and separation from his mother. The cause could be the child's desire to obtain attention, and he may have learned that he can achieve this by demonstrating aggressive and distinctive behavior. On the other hand, these behaviors could be secondary to a primary condition of mental retardation. The aggressive behaviors displayed by the child in this case would be a secondary reaction or social emotional overlay, reflecting the limited mental development and adaptive behavior level of the handicapped child rather than intentionally divertive behavior.

The so-called "defective delinquent" is a child with mental retardation and delinquency. In 1951, Westwell reported that a committee of members from the American Association on Mental Deficiency (AAMD) met to study the problems of the defective delinquent. They concluded:

> A mentally defective delinquent is any person affected with intellectual impairment from birth, or from an early age, to such an extent that he is incapable of managing himself and his affairs; who is charged with, arraigned for, or convicted of a criminal offense; and who for his own welfare and the welfare of others in the community, requires supervision, control, or care; and who is not insane or of unsound mind to such an extent as to require his commitment to an institution for the insane [p. 285].

There seems to be no real relationship between the degree of intelligence and delinquency. Kvaraceus (1964) has interpreted defective delinquency in terms of Dollard's theory that frustration leads, in turn, to aggression. This is borne out in the retarded delinquent because he has less tolerance for frustration. This is not to say that there are more delinquents in the retarded range of intelligence because

this is not true. The mentally retarded are seemingly more easily apprehended by the police, whether or not they had a major or minor role in the delinquency act performed. The most significant attribute relating IQ and delinquency is the variable of social-cultural influences. These range for the delinquent from poor home conditions and parental training to mistreatment within a poor nonunderstanding community environment. Blackhurst (1968) reviewed information on various aspects of mental retardation and delinquency and reported on twelve alternative hypotheses to account for the relationship between delinquency and retardation other than low IQ. They were:

1) There is a "relatively higher incidence of mental retardation among the socially, economically, and culturally-deprived segment of our population, which also produces the proportion of prison inmates" (Allen, 1966, p. 4).
2) When negative correlations between intelligence and delinquency are found, they can be attributed "to the association with delinquency of that constellation of cultural factors which adversely affect the test score" (Woodward, 1955, p. 282).
3) There are more commitments and fewer paroles for mentally retarded individuals accused of crimes (Glueck, 1935); thus, one might expect the incarcerated population to be lower in intelligence.
4) Many times, retarded individuals are used as pawns by more intelligent ring leaders and are apprehended more easily (Wallace, 1929).
5) Delinquent individuals from good homes, and who have high IQ scores, are often returned to their homes, if it appears that the parents are able and willing to provide adequate control (Mann & Mann, 1939).

6) The retarded often make more mistakes while committing crimes and are not clever in eluding pursuit (Wallace, 1929).

7) Very often, delinquency is accompanied by emotional instability, which can result in lower scores on intelligence tests (Burt, 1923).

8) Retarded females who engage in illicit sexual activities are more frequently apprehended than normal females who engage in similar acts.

9) Criminals often score lower on tests of intellectual ability because of errors of a specific sort; they disobey instructions and are more impulsive in the testing situation. This is characteristic of extroverts, and there are more extroverts in the delinquent than in the normal population (Payne, 1961).

10) Often, the retarded do not have sufficient funds to provide for adequate defense counsel and are subsequently convicted (Wallace, 1929).

11) Delinquents may have low educational attainment, thus handicapping them on verbal IQ tests. For example, one group of delinquents had mean verbal IQ scores of 82, but had mean performance IQ scores of 98 on the WISE (Payne, 1961).

12) Many times a diagnosis of mental retardation in the criminal population has been arrived at by using a mental age score of 11 or 12 years as a criterion. Wallin (1924) indicated that with this as a criterion, 47% (44, 556, 000) of whites and 89% (9, 309, 400) of Negroes would have been classified as mentally retarded in 1922 (based on World War I army records). It is apparent that the use of norms established for children, as in the example above, is an unacceptable practice when testing adults and would lead to inflated estimates of lowered intelligence in the criminal population (Zeleny, 1933, pp. 381-382).

Mulligan (1969) wrote concerning the origin and characteristics of dyslexia (reading disability) and concomitant delinquency problems. He confirmed earlier studies about illiteracy and its association with antisocial behaviors. He found that 60% of most known delinquents were youths with two or more years of academic reading retardation. He also described the need for closer diagnostic study of delinquent nonreaders to determine if both conditions could have common antecedents. A criminologist (Keldgold, 1969) attempted to establish brain damage as that common antecedent of delinquency and other problems in a study of apprehended youths. Taylor (1969) reviewed the literature and reported on 100 epileptic children. He concluded that aggressiveness in these patients was less likely to be a result of present interference in brain structures and more likely to be a result of early brain damage to mental control structures. His findings suggest that to prevent learned behavior problems, parental management and special training considerations are needed early.

Sabatino and Cramblett (1968) reported on the behavioral sequelae of California encephalitis virus infection in children. The purpose of the study was to examine the personality and behavioral sequelae of 14 children between 7 months and 2 years after their initial admission to the hospital. At the time of their assessment they ranged in age from 5 to 14 years.

The children they examined upon release from the hospital had previously become suddenly ill during the summer months due to an arbor virus carried primarily by mosquitos. The children were hospitalized from 4 to 15 days with a median duration of 7 days, and the maximum temperature for each child ranged from 91° to 105° F. During hospitalization, 12 of the subjects complained of severe headaches; 9 had their first seizures. Five were comatose and three were semi-comatose. Ten of the children were disoriented for periods of up to three days. EEG findings were abnormal in eight out of nine patients during the acute

phase of their illness. Subsequent EEG's obtained one to ten months after the acute illness were normal in three and borderline in six patients. Only one tracing showed a focal lesion; the others were all interpreted as generalized cerebral dysfunctions.

Quay's (1965) inventory was used in a similar study. Clinic personnel, teachers, and parents agreed that all the children showed some post-illness sequelae in personality and behavior following hospitalization. A cluster analysis of the behavioral sequelae observed by the subjects' parents showed the post-hospitalized children to be typically nervous, hyperactive, restless, disruptive, distractable, easily frustrated, tense, preoccupied with self, and irritable. (See Table 6.) Two of the children were reported to be enuretic, and six had headaches or other somatic symptoms following the illness. None of the children reported these complaints before the illness.

When the behavioral corollaries resulting from CEV infection in 14 children were examined within two years following the illness, the children seemed to have difficulty in receiving consistently meaningful basic visual and auditory perceptual information. They seemed to have no difficulty in the higher language functions or in the conceptual skills associated with verbal intellectual function. The personalities of these children seemed to fit the "organic" hyperkinetic syndrome. The result was a behavior pattern seemingly associated with specific learning disorders.

The importance of the Sabatino and Cramblett study is that the children were discharged from the hospital with little thought that any serious long-term problem existed. Yet, they showed severe learning, behavioral, and adjustment difficulties routinely at home and school.

Far too frequently, children are seen as cases rather than people--pathogenetic entities, students, delinquents, and charges of the state. But a social-emotional concern for an individual must be as great as any concern for health or safety. The idea of a total treatment environment is

TABLE 6

QUAY'S CHECKLIST OF PROBLEM BEHAVIORS DENOTING FREQUENCY OF CASES WHERE AGREEMENT BETWEEN TEACHER. PARENT, AND PSYCHOLOGIST WAS ESTABLISHED

Behaviors Rated as No Problem (seldom observed):

FREQUENCY	BEHAVIOR
12	Oddness--bizarre behavior
12	Attention-seeking, show-off behavior
12	Fixed expression--lack of emotional reactivity
9	Self-consciousness--easily embarrassed
11	Crying over minor annoyances and hurts
11	Preoccupation--"in a world of his own"
13	Shyness, bashfulness
13	Jealousy over attention paid other children
13	Repetitive speech
13	Fighting
12	Loyal to delinquent friends
10	Excessive daydreaming
14	Masturbation
11	Has bad companions
13	Depression--chronic sadness
9	Uncooperativeness in group situations
12	Aloofness, social reserve
10	Passivity, suggestibility--easily led by others
11	Clumsiness, awkwardness, poor muscular coordination
8	Destructiveness in regard to his own and/or other's property
9	Negativism--tendency to do the opposite of what is requested

TABLE 6 (continued)

QUAY'S CHECKLIST OF PROBLEM BEHAVIORS
DENOTING FREQUENCY OF CASES
WHERE AGREEMENT BETWEEN
TEACHER, PARENT, AND PSYCHOLOGIST
WAS ESTABLISHED

Behaviors Rated as No Problem (seldom observed):

FREQUENCY	BEHAVIOR
14	Sluggishness, lethargy
14	Drowsiness
11	Enuresis--bedwetting

Behaviors Rated as Mild Problem (occasionally observed):

FREQUENCY	BEHAVIOR
7	Lack of self-confidence
6	Anxiety, chronic general fearfulness
5	Disobedience, difficulty in disciplinary control
6	Often has physical complaints--for example, headaches, stomachache

Behaviors Rated as Moderate Problem (frequently observed):

FREQUENCY	BEHAVIOR
11	Restlessness--inability to sit still
9	Disruptiveness--tendency to annoy and bother others
7	Short attention span
9	Inattentiveness to what others say
8	Temper tantrums
9	Hypersensitivity--feelings easily hurt
9	Tension, inability to relax
12	Hyperactivity--"always on the go"

TABLE 6 (continued)

QUAY'S CHECKLIST OF PROBLEM BEHAVIORS
DENOTING FREQUENCY OF CASES
WHERE AGREEMENT BETWEEN
TEACHER, PARENT, AND PSYCHOLOGIST
WAS ESTABLISHED

Behaviors Rated as Moderate Problem (frequently observed):

FREQUENCY	BEHAVIOR
11	Distractibility
8	Nervousness, jitteriness, jumpiness--easily startled
7	Irritability, hot tempered--easily aroused to anger

From: Sabatino & Cramblett, "Behavioral Sequelae of California Encephalitis Virus Infection in Children," Developmental Medicine and Child Neurology, 10, 1968, p. 335. Reproduced with permission.

not a new one, but the concept that it should focus upon the child as a person with feelings, as well as a biological being, has seldom been practiced.

Believing that the handicapped must be recognized as people, Gruhn and Krause (1968) examined the psychological and social adjustment of 35 female and 38 male vocational high school students with significant handicaps of all types by means of sociometric procedure and standardized questionnaires completed by students and teachers. In comparing these handicapped individuals to a nonhandicapped group, both showed similar adjustments on the sociometric scale, self-concept, and teacher evaluation. The handicapped had a far greater need for friends, were rigid in view of self, and had a significantly reduced level of aspiration.

Mitchell (1970) investigated differences in "Barrier" scores between groups assessed as either high or low in their adjustment to the stress induced by severe physical disability. The Barrier score, an index of adjustment to reality, was constructed of positive social and vocational goals. The subjects were 48 paraplegics and 48 quadraplegics. The high- and low-scoring paraplegics were significantly different on various social, adaptive, and personality measures. There was no significant difference between quadraplegic groups who scored high and low. The study indicated that the amount of physical involvement does not critically interfere with adjustment until that point where the lack of physical function interferes with personal and vocational success and, therefore, independence.

Ossowski (1969) found that the motivation of blind youth to respond to stress--consisting of heightened emotional tension, action to satisfy primary drives, or basic needs--was determined by the types of stress, perception of stress, self-appraisal capabilities, resistance to stress, and whether one's disability might be exposed by counteracting stress.

Their choice of actions was motivated by:

1) fear of being juxtaposed with the public,

2) fear of being made aware of their handicaps, and

3) striving to show that blindness is not the worst handicap.

Nihiro, Foster, and Spencer (1968) established the need to understand the basic parameters of coping behaviors, which in the retarded vary considerably in nature and content, according to the level of retardation in the physically handicapped. Even if this is so, it may be very hard for normal social reactions to occur because the disability seemingly attracts so much attention as to detract from an interpersonal relationship between the handicapped and the physically normal person. Davis (1961) found that the interaction between the physically impaired and the "normal" person was characterized by an overcompensation of the normal person for the handicapped. This limited the relationship, the behaviors were rigid, and the sentence structures in consideration were short.

It is useful to understand how the normal person reacts to physical impairment in others. "Aesthetic aversion" can be seen in the reactions of normal children to physical deviance (impairment) in other children (Barker, 1964). For example, groups of 10- to 12-year-old children (N = over 600) consistently ranked children's pictures according to their liking of them in the following order--from most to least liked--a normal child, a child with crutches and a leg brace, a child in a wheel chair, a child with a left forearm amputation, a child with a slight facial disfigurement, and an obese child (Richardson & Royce, 1968). The same ordering was found using a social distance technique with drawings in a high school sample. The obese child, who had an aesthetic impairment, was the least liked by girls; and the forearm amputee, who had a functional impairment, was the least liked by boys in both age groups (Matthews & Westie, 1966). Racial variables made no difference in the rank ordering (Richardson & Royce, 1968).

Unfortunately, children's negative attitudes seem to increase with age (Billings, 1963) and are not overcome by social contact with the deviant (Richardson, 1969). Shears and Jensema (1969) suggested, on the basis of 94 young adults' social distance evaluations and rankings of ten anomalies with respect to desirability in a friend and as a self-affliction, that six dimensions combine and interact to form attitudes toward deviants: visibility, communication, social stigma, reversibility, degree of incapacity, and difficulty in daily living. Perhaps children are more critical of physically visible and social stigma in their consistently high rejection of the obviously handicapped child. This possibility is suggested by 186 high school students' responses to 12 exceptionalities, using a paired comparison questionnaire (Jones, Gottfried, & Owens, 1966). In this study, the more visible disabilities led to greater rejection regardless of the social context described; but the ordering of less visible anomalies interacted with social context.

The nature of social interaction and social status relates closely to an individual's emotional adjustment, whether judged by self-concept (Wylie, 1967) or by personality traits (Coopersmith, 1967). In study after study, the social acceptability of children, from preschool to college age, has been found to relate significantly and positively to personality or emotional adjustment and negatively to anxiety. The criteria for adjustment included teachers' ratings (Kwall, Smith, & Lachner, 1967), degree of initiation of verbal interaction with peers, independence from adults, responses to projective techniques such as the Rorschach (Northway & Wigdor, 1947), creative thinking (Yamamoto, Lembright, & Corrigan, 1966), and responses to anxiety scales (Ueda, 1964). Usually, however, researchers have examined responses to self-concept and/or social-personal adjustment on questionnaires. The nature of the relationship is unclear, but a slight positive relationship occurs quite consistently in experimental studies, regardless of the size, sex, socioeconomic status, or heterogeneity of the sample. Therefore,

one would expect socially unaccepted children, such as physical deviates, to show poorer emotional adjustment than more accepted children.

> In view of their generally negative public reception and of the "looking-glass" nature of self-concepts, it is no wonder that those who are deviant are inclined to be frustrated, unhappy, and often hostile . . . No matter how visible their stigmata, individuals will attempt to "cover" them; the extra "performance" required (Goffman, 1959) drains the deviants' energy and their failure to minimize their defects tends to discourage them [p. 113].

In conjunction with the opinion of Yamamoto, et al., (1966) is the finding that self-descriptions of 107 nine- to eleven-year-old handicapped children, when compared to those of nonhandicapped children, showed more expression of personal inadequacy and uncertainty and more general self-depreciation (Richardson, Hastorf, & Dornbusch, 1964).

Drug Abuse

In previous years an introductory chapter on social disability would not have contained a section on drug abuse. The problem now has such far-reaching implications for society that it is a major social disability issue. The drug problem has several distinct features:

1) drug controls in and out of institutions,
2) the recognition of the symptoms of drug abuse,
3) the necessity of interdisciplinary professional involvement,
4) the need to see the family as a treatment unit, and
5) the education of the general public to the issues of drug use.

Leech and Jordan (1968) have prepared an easily read book on the drug problem. They differentiate drug takers from those "addicted" to drugs. The difference between addiction and dependence can be set in a biological-psychological balance. Addiction occurs when there is both a biological need and a psychological dependency; dependence is present when there is no biological need, but a definite psychological one.

A committee set up by the British Government to advise on drugs liable to cause addiction issued the following definition:

> DRUG ADDICTION is a state of periodic or chronic intoxication produced by the repeated consumption of a drug (natural or synthetic); its characteristics include:
>
> 1) an overpowering desire or need (compulsion) to continue taking the drug and to obtain it by any means;
>
> 2) a tendency to increase the dose, though some patients may remain indefinitely on a stationary dose;
>
> 3) a psychological and physical dependence on the effects of the drug;
>
> 4) the appearance of a characteristic "abstinence syndrome"[1] in a subject from whom the drug is withdrawn;
>
> 5) an effect detrimental to the individual and to society [p. 13].
>
> In 1965, the same committee thought fit to define an addict as:
>
> a person who, as the result of repeated administration, has become dependent upon drugs controlled under the Dangerous Drugs Act and has an overpowering desire for its continuance, but who does not require it for the relief of organic disease [p. 14].

This definition covers addiction not only to heroin and cocaine but also to all the drugs mentioned in the Dangerous Drugs Act which include morphine, pethidine, methadone, and codeine.

Two types of dependence on drugs may be distinguished: one is a combined physical and psychological dependence, and the other is psychological only. The former is produced by the addictive drug, particularly the narcotics[2] and barbiturates, producing a physical

---

[1] Abstinence syndrome means the pattern of physical and mental symptoms and behavior which occurs when the patient/addict "abstains" from, or does not have, the drug to which he is addicted.

[2] Scientifically, narcotic means all tranquilizers, sedatives, sleeping pills, etc.; but it is generally used in international law to refer to any potentially harmful or addicting drug.

tolerance. This condition is evident when drugs are taken to the point that they are needed in order for the person to function at a level tolerable to the user. The user is compelled to increase the dosage in order to stave off withdrawal symptoms. Stoppage of the drug could cause severe and painful repercussions and in some cases death. Withdrawal or the abstinence syndrome is produced when these drugs are abruptly discontinued. However, the physical dependence created by alcohol or barbiturates differs from that of the narcotics. Small doses of alcohol or barbiturates can be taken regularly over long periods without producing noticeable physical dependence. The sustained use of even small doses of narcotics always leads to physical dependence.

Cocaine produces no troublesome physical dependence, but it is harmful to its users because they tend to imagine they must protect themselves from unrealistic or other grave dangers (paranoid schizophrenia).

Psychological dependence on drugs occurs when the addicted person places psychological meaning on the use of the drugs and their effects. Its characteristics are:

1) a desire (but not compulsion) to continue taking the drug for the sense of improved well-being which it engenders;
2) little or no tendency to increase dose;
3) some degree of psychological dependence on the effect of the drug, but absence of physical dependence and hence of the abstinence syndrome;
4) detrimental effects, if any, primarily on the individual.

Psychological dependence on drugs is difficult to define. Drugs cause a change of mood or "personality" and, although there is no medical reason for taking the drug, the user feels the drug offers a means of escaping from an unpleasant emotional situation. The adolescent suffering from chronic fatigue may take pep pills at the expense of ignoring his body's message telling him to "ease up."

When a healthy individual becomes dependent on drugs in order to effect a change of personality, there is obviously something wrong which needs professional attention. If a drug is used to escape from boredom, it is only a temporary relief; the reason for being bored is only lost in the dependency on drugs.

Hager, Vener, and Stewart (1971) examined sex, age, and school differences associated with drugs in eighth-grade to twelfth-grade students in white, nonmetropolitan, noncollege communities of the midwest. They found drug use to be present by age 13. The younger users had experience primarily with marijuana and other nonhard drugs. For this reason they believe drug education must begin in the elementary schools.

The study found a large increase in percentage of users of soft drugs (marijuana, hallucinogens, and amphetamines) occurring in the 15- and 16-year-old age bracket. Once again, this seems to represent a need for adolescents to be accepted by an established peer group--to be on the inside--even if the group is on the outside of general society. Most adolescent drug users were insecure and lacked academic, athletic, or social competence.

At age 16 a leveling off of the use of soft drugs occurred. Adult status-seeking adolescents saw drug use as nonresponsible, delinquent, subculture-bond behavior; others, a small number, moved to the hard drugs, becoming integrated into the drug subculture. Trends in hard drug use of the adolescent were not yet fully established because of the limited number who do become addicts.

Randall (1970) reported on the rising incident of drug usage in the Los Angeles city schools showing figures of 925 reported arrests of school-age youths in 1956-1957 to 6,216 in 1968. The increase in the number of apprehensions among elementary school pupils during the years rose from 7 cases in 1957 to 24 cases in 1966. The major type of drug abuse in elementary-age children was glue sniffing, aerosol

material, and other inhalants. According to Randall, children have been taking drugs and mixing them into what they term a "fruit salad" and sampling the resulting concoction. Twenty "paint thinner" addicts were reported during a one-year period from among 75,000 Stockholm school children. The rapid increase in the rise of drugs centers around the family medicine cabinet which, on an average, may contain 30 different medications, some of which have been there for as long as 20 years.

Soloman (1968) classified drug abuse according to the reasons for such use. He proposed that the system of social, neurotic, or psychotic causes explains why the problem is initiated and persists. He also proposed that the proper management of each is distinctly different as shown in Table 7.

While views like this seem to predominate, recent research has suggested that the personalities of marijuana smokers may be more complex. Hogan, Mankin, Conway, and Fox (1970) studied the personality correlates of four levels of marijuana used at two universities. The sample was divided into frequent users, occasional users, nonusers, and principle nonusers. The groups differed significantly on 10 of 19 scales of the California Psychological Inventory (Gough, 1957) and 4 questionnaire items. According to their data, users in their groups were socially poised, open to experience, and concerned with the feelings of others. Conversely, they also seemed impulsive, pleasure seeking, and rebellious. In contrast, nonusers were responsible and rule abiding; however, they also tended to be inflexible, conventional, and narrow in their interests.

Berg's (1970 b) report on the patterns of nonmedical use of dangerous drugs discusses the type of user. She writes:

> Among secondary school students in San Mateo County, California (1969), the proportion of marijuana use increases. This pattern is also the same for Utah high school dropouts (1969), hippies in San Francisco (Shick, Smith, & Mayers, 1968), and other groups across the country. The following

TABLE 7

TYPES OF DRUG DEPENDENCE AND THEIR CHARACTERISTICS

Type of Drug Dependence	Basic Symptom Subserved by Drug Taking	Patient's Fear	Goal of Drug Taking	Chief Treatment	Danger
Social	Dissatisfaction	Unfulfillment, Rejection	Identity Status, Pleasure	Educational	Waste, Crime
Neurotic	Anxiety	Suffering	Relief	Psychological	Addiction
Psychotic	Horror	Annihilation	Escape	Medical	Suicide, Murder

From: Soloman, "Medical Management of Drug Dependence," 1968, p. 1523. Reproduced with permission.

TABLE 7

TYPES OF DRUG DEPENDENCE AND THEIR CHARACTERISTICS

Type of Drug Dependence	Basic Symptom Subserved by Drug Taking	Patient's Fear	Goal of Drug Taking	Chief Treatment	Danger
Social	Dissatisfaction	Unfulfillment, Rejection	Identity Status, Pleasure	Educational	Waste, Crime
Neurotic	Anxiety	Suffering	Relief	Psychological	Addiction
Psychotic	Horror	Annihilation	Escape	Medical	Suicide, Murder

From: Soloman, "Medical Management of Drug Dependence," 1968, p. 1523. Reproduced with permission.

patterns also emerge from the frequency statistics of other drugs:

1) LSD and Other Hallucinogens--The proportion of users decreases as frequency of use increases.

2) Amphetamines--These stimulants are second only to marijuana in use, but rates of use of the amphetamines are well below rates of marijuana use. Only a small proportion of those reporting amphetamine use said that they were frequent or regular users. Among hippies in Haight-Ashbury (Shick, et al., 1968), oral use of amphetamines was extremely high; but even among this group, the proportion of users decreased drastically as frequency of use increased.

3) Barbiturates and Tranquilizers--While use of these drugs appears to be increasing, few statistics on patterns of use are available. The data, however, suggest that only a small proportion of persons uses these drugs without prescription on a frequent or regular basis.

4) Opiates--Survey statistics are not available on patterns of use of this class of drugs.

5) Special or "Exotic" Substances--Survey statistics are not available on patterns of use of these substances [p. 16].

Many drug users reported that they used more than one drug. Marra (1968) reported that two of every five marijuana users said that they had used one or more drugs in addition to marijuana. King (1969) found that about 4% of the respondents reported using both marijuana and LSD. College students in the Denver-Boulder metropolitan area reported the following multiple drug use: marijuana and amphetamine use - 6%; marijuana and LSD use - 1%; marijuana, amphetamine, and LSD use - 4%.

School officials are aware that drug use may be as serious a problem at the secondary level. Concern over effective remedial and preventive measures is growing more and more evident among parents, teachers, law enforcement officials, and numerous professional groups. While many have argued for or against the use of various drugs, the impact of their statements has been diminished by a lack of supportive

empirical data. Research on both the physiological and psychological effects of different drugs and on the characteristics of drug users is limited.

Dearden (1971), the Coordinator of Drug Education at Griffin Hospital, Derby, Connecticut, has listed the following points on the recognition of the drug cult as important:

1) Drug use among students is a social phenomenon.

2) The need for recognition and acceptance is high among drug-using students, and their verbal activity and occasional aggressiveness in small groups is one means of gaining the attention they seek.

3) Drug users as a subgroup tend to be cohesive and supportive of each other, thereby providing an atmosphere in which the individual can feel secure, cared about, and important as a human being. The group cohesiveness is helped along by the sharing of a common experience, that is, the use of drugs. Factual knowledge is less among nonusers. Knowledge about drugs among drug users, however, is primarily experiential and "grapevine" information, which is frequently distorted or incomplete.

4) Many students who use drugs share their drugs and do not "push" them. In addition, they do not actively promote or sell the idea of using drugs to those students who do not use them.

5) Students have shown a reduction in the use of drugs or a discontinuance of their use when made to feel accepted and respected [p. 10].

This discussion on drug abuse was not designed to be a complete review of this problem. Rather, it was designed to acquaint the reader with the social problems of drug misuse, some observations of the frequent user, and something about his management. To provide comprehensive coverage of the topic, two sections would need to be prepared: one relating the problems of acute addiction in children, and a second on what might be described as the "drug culture."

The reader, who is interested in greater depth on these topics, is encouraged to read Berg's (1970 a, 1970 b) recent publications:

1) Illicit Use of Dangerous Drugs in the United States: A Compilation of Studies, Surveys, and Polls.

2) The Nonmedical Use of Dangerous Drugs in the United States: A Comprehensive View.

Both of these papers can be obtained from the Drug Control Division, Office of Science and Drug Abuse Prevention, Bureau of Narcotics and Dangerous Drugs, United States Department of Justice, Washington, D. C. 20537.

References

Allen, R. C. Toward an exceptional offender's court. Mental Retardation, 1966, 4, 3-7.

Barker, D. G. Concepts of disabilities. Personnel and Guidance Journal, 1964, 43, 371-374.

Berg, D. F. Illicit use of dangerous drugs in the United States: A compilation of studies, surveys, and polls. Drug Control Division, Office of Science and Drug Abuse Prevention, Bureau of Narcotics and Dangerous Drugs, United States Department of Justice, Washington, D. C., 1970 a.

Berg, D. F. The nonmedical use of dangerous drugs in the United States: A comprehensive view. Drug Control Division, Office of Science and Drug Abuse Prevention, Bureau of Narcotics and Dangerous Drugs, United States Department of Justice, Washington, D. C., 1970 b.

Billings, H. K. An exploratory study of the attitudes of noncrippled children toward crippled children in three selected elementary schools. Journal of Experimental Education, 1963, 31, 381-387.

Blackhurst, A. E. Mental retardation and delinquency. Journal of Special Education, 1968, 2, 379-391.

Burt, C. Delinquency and mental defect. British Journal of Medical Psychology, 1923, 3, 168-178.

Cartwright, D. S., Howard, K. I., & Short, J. F., Sr. The motivation of delinquency. Unpublished manuscript, 1966.

Cloward, R. A., & Ohlin, L. E. Delinquency and opportunity: A theory of delinquent gangs. Glencoe, Illinois: Free Press, 1960.

Cohen, A. Delinquent boys. Glencoe, Illinois: Free Press, 1965.

Conger, J. J., & Miller, W. C. Personality, social class, and delinquency. New York: John Wiley and Sons, 1966.

Coopersmith, S. The antecedents of self-esteem. San Francisco: W. H. Freeman and Co., 1967.

Davis, F. Deviance disavowal: The management of strained interaction by the visibly handicapped. Social Problems, 1961, 9, 120-132.

Dearden, M. H. Observations about student use of drugs. School Management, 1971, 15, 10.

Eisner, V. The delinquency label: The epistemology of juvenile delinquency. New York: Random House, 1969.

Glueck, E. T. Mental retardation and juvenile delinquency. Mental Hygiene, 1935, 19, 549-572.

Glueck, E., & Glueck, S. Physique and delinquency. New York: Harper and Brothers, 1956.

Goffman, E. The presentation of self in everyday life. Garden City, New York: Doubleday, 1959.

Gough, H. G. The California psychological inventory. Palo Alto, California: Consulting Psychologists Press, Inc., 1957.

Gruhn, H., & Krause, S. On the social behavior of physically handicapped children and teenagers. Probleme und Ergebnisseder Psychologie, 1968, 23, 73-86.

Hager, D. L., Vener, A. M., & Stewart, C. S. Patterns of adolescent drug use in middle America. Journal of Counseling Psychology, 1971, 18, 292-297.

Hogan, R. T., Mankin, D., Conway, J., & Fox, S. Personality correlates of undergraduate marijuana use. Journal of Clinical and Consulting Psychology, 1970. (In press.)

Jones, R., Gottfried, N. W., & Owens, A. The social distance of the exceptional: A study at the high school level. Exceptional Children, 1966, 32, 551-556.

Keldgold, R. E. Brain damage and delinquency: A question and a challenge. Academic Therapy, 1969, 4, 93-99.

King, F. W. Marijuana and LSD usage among male college students, prevalence rate, frequency, and self-estimates of future use. Psychiatry, August 1969, 32, 265-276.

Kvaraceus, W. C. Mental retardation and norm violation. Journal of Education, 1964, 147, 17-24.

Kwall, D. S., Smith, J. T., Jr., & Lachner, F. M. Functional relationship between sociometric status and teacher ratings, expiration level, academic, and parent-child variables. Proceedings of the 75th Annual Convention of the APA, 1967, 2, 285-286.

Lapouse, R., & Monk, M. A. Fears and worries in a representative sample of children. American Journal of Orthopsychiatry, 1959, 29, 803-818.

Leech, K., & Jordan, B. Drugs for young people--their use and misuse. Oxford, England: The Religious Education Press, Ltd., 1968.

MacFarlane, J. W., Allen, L., & Honzik, M. P. A developmental study of the behavior problems of normal children between twenty-one months and fourteen years. Berkeley, California: University of California Press, 1954.

Mann, C. W., & Mann, H. P. Age and intelligence of a group of juvenile delinquents. Journal of Abnormal Social Psychology, 1939, 34, 351-360.

Marra, E. G. Intoxicant Drugs: Survey of student use, roles, and policies of the university. State University of New York at Buffalo, University Committee on Drugs and the Campus, 1968.

Matthews, V., & Westie, C. A preferred method for obtaining rankings: Reactions to physical handicaps. American Sociological Review, 1966, 31, 851-854.

Mitchell, K. R. The body image barrier variable and level of adjustment to stress induced by severe physical disability. Journal of Clinical Psychology, 1970, 26, 49-52.

Mulligan, W. Study of dyslexia and delinquency. Academic Therapy, 1969, 4, 177-187.

Nihiro, K., Foster, R., & Spencer, L. Measurement of adaptive behaviors: A descriptive system of mental retardates. American Journal of Orthopsychiatry, 1968, 31, 381-387.

Northway, M. L., & Wigdor, B. T. Rorschach patterns related to sociometric status of school children. Sociometry, 1947, 10, 186-199.

Ossowski, R. Behavior of blind youth under stress. Przeglad Psychologiczny, 1969, 18, 85-102.

Parsons, T. Certain primary sources and patterns of aggression in the social structure of the western world. Psychiatry, 1967, 10, 167-181.

Pate, J. E. Exceptional children in the schools. Edited by L. M. Dunn. New York: Holt, Rinehart, and Winston, Inc., 1963.

Payne, R. W. Cognitive abnormalities. In H. J. Eysenck (Ed.), Handbook of abnormal psychology. New York: Basic Books, 1961.

Quay, H. C. Juvenile delinquency. Princeton, New Jersey: D. Van Nostrand Co., Inc., 1965.

Randall, H. B. Patterns of drug use in school-age children. Journal of School Health, 1970, 11, 296-301.

Reckless, W. C. The crime problem. New York: Appleton-Century-Crofts, 1967.

Richardson, S. A. The effect of physical disability on the socialization of a child. In D. A. Goslin (Ed.), Handbook of socialization theory and research. Chicago: Rand McNally, 1969, 1047-1064.

Richardson, S. A., Hastorf, A. H., & Dornbusch, S. M. Effects of physical disability on a child's description of himself. Child Development, 1964, 35, 893-907.

Richardson, S. A., & Royce, J. Race and physical handicap in children's preference for other children. Child Development, 1968, 39, 467-480.

Richmond, J. B. "Introduction," Mental retardation: A handbook for the primary physician. A report of the American Medical Association Conference on Mental Retardation, Chicago, Illinois, April 9-11, 1964.

Sabatino, D. A., & Cramblett, H. G. Behavioral sequelae of California encephalitis virus infection in children. Developmental Medicine and Child Neurology, 1968, 10, 331-337.

Shears, L., & Jensema, C. J. Social acceptability of anomalous persons. Exceptional Children, 1969, 36, 91-96.

Shick, J. F. E., Smith, D. E., & Mayers, F. H. Use of marijuana in the Haight-Ashbury subculture. Journal of Psychedelic Drugs, 1968, 2, 49-66.

Soloman, P. Medical management of drug dependence. Journal of the American Medical Association, 1968, 206, 1521-1526.

Taylor, D. C. Aggression and epilepsy. Journal of Psychosomatic Research, 1969, 13, 229-236.

Ueda, T. A study of the stability of sociometric status among elementary school children: On the stability of choice received. Journal of Nara Gakugei University, 1964, 12, 135-154.

Wallace, G. L. Are the feebleminded criminals? Mental Hygiene, 1929, 13, 93-98.

Wallin, J. E. W. The education of handicapped children. Boston: Houghton-Mifflin, 1924.

Westwell, A. E. The defective delinquent. American Journal of Mental Deficiency, 1951, 56, 283-289.

Woodward, M. The role of low intelligence delinquency. British Journal of Delinquency, 1955, 5, 281-303.

Wylie, R. C. The self-concept. Lincoln, Nebraska: University of Nebraska Press, 1967.

Yamamoto, K., Lembright, M. L., & Corrigan, A. M. Intelligence, creative thinking, and sociometric choice among fifth grade children. Journal of Experimental Education, 1966, 34, 83-89.

Zeitlein, H. Phoenix reports on high school misbehavior. Personnel and Guidance Journal, 1957, 35, 384-387.

Zeleny, L. D. Feeblemindedness and criminal conduct. American Journal of Sociology, 1933, 38, 564-576.

Chapter II

A Review of Cultural-Environmental Factors Related to Neglected and Delinquent Youth

In Chapter I, a serious effort was undertaken to review the variables which seem to relate to neglect and delinquency in adolescent youth. The cause of the behaviors related to neglect and delinquency is, for the most part, speculation; and most discussions found in the literature are mostly theoretical. The primary mission of this chapter was to focus on and document reports of why neglect and delinquency occur. To obtain data and actual research, the review centered upon the social milieu and the maternalization during early childhood. The reader will not find a central theme to this review, but simply somewhat connected subheadings. If this reviewer were to postulate on the nature of man and how he becomes what he is, following the examination of the literature reported herein, it would not be difficult to project that human neglect can only be defined in terms of the emotional or affective support received by children in the early years of life, primarily from birth to three years old.

The main points found in this chapter are a discussion on:

1) how early maternal relationships may be viewed,
2) what the body of research literature reports about these relationships, and
3) where interventions can begin to possibly offset the difficulties that seem to contribute to neglect and delinquency.

When Do Neglect and Delinquency Begin?

Is it conceivable that neglect is simply an inappropriate parental or maternal relationship with a given child?

A major question related to what neglect and delinquency are is how they begin. In the review to follow, let's begin by disspelling an age-old argument. Nature (biological characteristics) and nurture (environmental influences) interact to produce an end product. One may or may not play a predominant role over the other in the case of a given individual.

Most certainly, the two men responsible for a culmination of focus on the nature and nurture argument were Itard (1962) and Sequin (1907). At that time it would appear that they were very much environmentalists, fiercely engaged in disproving the position held for such a long period by the structuralists. The point they made was that while the basic genetic constitution of an individual may not be altered or modified through training, early training does alter the degree to which people are able to interact successfully with their environment. If one assumes this position, then he also, in effect, assumes that there is such a thing as a critical period for training of specific functions. Language function seems to be influenced by stimulation during the 18- to 36-month period, social imprint from 6 to 18 months, motor skills from 3 months on, and sensory and perceptual training from 2 years. Attitudes begin to take definite shape from three to five, especially those concerning social values as Jones (1954) has shown in his research on attitudes toward disability and human differences. It would appear that children have little recognition of physical disability until they reach the age of four. At that age, they see it but do not associate it with making the person different. They may well ask a severely physically handicapped child to share a tricycle. At age five they do not only recognize the disability but are quite willing to avoid certain social contacts with that child.

Needless to say, the time when all early training must have some definite meaning is when the child enters school. Up until the past few years it seemed that the majority of parents and teachers alike believed that children began their intellectual experience at the doors to grade one.

A false belief has existed that, during the magical period of early school, differences in human performance were equalized. The early childhood focus of more recent years has illuminated the fact that six-year-olds are not all "average" (ready upon entering school to read and relate socially). Unlike the tabula rasa, children do not appear on the first day of school with equal backgrounds, socially or physiologically from equally stimulating environments, all fresh and ready to be marked by an educational stylist. Children are developmental beings and, like their adult counterparts, are either ready to begin on social and mental tasks, functioning in such a manner that they profit from these tasks, or they become overwhelmed by these early experiences and do not progress. It is feasible to think that, given a structured situation beyond their readiness, they may regress developmentally in the face of it. There is a growing body of research (Prudhommeau, 1961) to suggest this may well be the case. A study of children entering French schools revealed that children, who were unable to compete in the face of learning pressures for which they lacked the developmental equipment to deal, regressed socially and intellectually, or at least they did not develop at a rate consistent with their chronological growth rate. Prudhommeau refers to this as educationally caused pseudo-retardation.

What is the Cultural Relationship to the Functional Component in Children?

Riessman (1962), in a text on the subject of cultural deprivation, states that in 1950 approximately one child out of every ten in the fourteen largest cities of the United States was "culturally deprived." He adds that by 1960 this figure had risen to one in three. In percentages for the total population, one author (Goodman, 1960) estimates that between 20% and 40% of the children in this country are culturally deprived. He believes that 31% (1960) is an exact figure of the number of children in the United States who fit this definition.

Gesell in his 1940 text projects that every eighth person in the population is a preschool child--a total of about 13% of the population. He states that "the environmental conditions which surround preschool children of the nation vary enormously. Many of these children are ushered into the world without the protection of medical service, . . . reared by parents who have received no guidance . . . [p. 7]." At the other extreme, Gesell indicates that some children are born to be privileged. This privileged infant is ". . . fed, weighed, bathed, sunned, aired, inoculated, examined, and re-examined at intervals, prescribed or periodic [p. 7]." According to Gesell, at two years of age this privileged child is in nursery school; at five he is in kindergarten, his mother having been trained to pay attention to his psychological as well as to his physical welfare.

The problem of defining cultural deprivation is most difficult, for what is probably meant by the term is, at best, subcultural deprivation. It would seem that in examining the subculture, the only relationship of real significance--or at least that is of concern in the developmental picture--is the child's interaction with his family and quite specifically with his mother. It would, therefore, appear that in defining cultural deprivation, we should not be concerned with the massive data which make interesting sociological reading. Rather, our concern should be focused upon the mother-child relationship as the specific subcultural means by which nurture and nature are brought together in culminating developmental experiences.

Havighurst (1963), in quoting a U. S. Office of Education study, reports that 61% of the population lived in metropolitan areas in 1960. According to his document, "crime, alcoholism, drug addiction, poverty, illiteracy, disease, unemployment, and broken families are found in city slums in massively greater degree than in society as a whole [p. 2]." Riessman, like Havighurst, believes the cause of the

"real problem" of our time has been the massive migration to the cities that began in the early 1900's.

Montaqu (1950), in writing the Theory of Human Culture, defines culture: ". . . it means neither social growth exclusively, nor the intellectual side of civilization, but has a broader definition which includes them, namely, the organization of value in human society [p. 60]." At another point in his book, Montaqu notes that ontology is not the sole possession of the culture but belongs to each individual in the culture as well. In essence, the problems of the culture begin with the subconsciously held ontology of the individual. Conscious or subconscious, it is evident that the growth of any one man and the influences that altered or promoted his development are what are important. The term "psychoculture" means that a person may be heavily influenced by psychocultural interactions, and personality is the determinant of the psychocultural action and reaction which is typical or characteristic of an individual (or organization of individuals) in the performance of his sociocultural role at any given stage of development.

Prenatal Influences

Following conception, according to some psychoanalytic theorists, the fetus has an environmental circumstance which will never again be equalled. At conception, heredity may have determined the new being's potentialities or limitations; now, however, the important consideration is the interplay between genetically transmitted factors and environmental influences. Mussen (1963) writes that "the growth and development of the individual's inherent potential may be actualized, facilitated, and enhanced--or thwarted, mutilated, and limited--depending on the kind of physical, social, and psychological environment he encounters [p. 71]." Montaqu (1950) adds that "the important point to understand . . . is that the same genes may be influenced to express

themselves differently and to have different end effects as a consequence of the different environments in which they function [p. 60]."

The effect of poor diet, drugs, irradiation, and maternal disease have all been shown to affect the physical growth and possibly influence the mental growth of the fetus.

Pasamanick and Lilienfeld (1955), throughout a series of studies, have gathered research evidence to indicate that difficulties in pregnancy and prematurity are more common among the lower social classes. They conclude, at least tentatively, that a greater proportion of mentally retarded than of normal children were born prematurely or had mothers with physiological disturbances during pregnancy, especially bleeding and toxemia.

Not only does the mother's physical health affect the fetus but also her emotional behavior. Sontag (1958) has demonstrated that sometimes permanent damage to the fetus can result because of emotional conditions within the mother. Some evidence now suggests that mothers-to-be, who are negatively disposed about having their children, bear children with more numerous and different kinds of problems. At least there appears to be a direct relationship between maternal reactions to pregnancy and the infant's subsequent adjustment. In one study, he (Sontag, 1958) reports that the mothers of colicky babies were more tense and anxious during pregnancy than mothers of noncolicky babies.

Maternal Deprivation

There is ample evidence that physical deprivation affects the growth of children. The research concerned with social isolation and any disruption of the usual physical (contact) and emotional bonds between the infant and his mother seems somewhat ambiguous.

It is generally agreed that the mother's role above and beyond physical care is:

1) to provide for the child a mother-child relationship where the child learns the emotional responsiveness necessary to maintain social awareness and to develop new human relationships;

2) to provide a constant source of environmental stimulation which directly affects the child's mental growth.

The exact extent or degree of influence or lack of it and the consequence to the developing child are not clearly established.

Historically, the first experiment in maternal deprivation was undertaken by Frederick IV of the Holy Roman Empire as recorded by the historian, Salimbene (not referenced).

> His second folly was that he wanted to find out what kind of speech and what manner of speech children would have when they grew up if they spoke to no one beforehand. So, he bade foster mothers and nurses to suckle the children, to bathe and to wash them, but in no way to prattle with them or to speak to them, for he wanted to learn whether they would speak the Hebrew language, which was the oldest, or Greek, or Latin, or Arabic, or perhaps the language of their parents, of whom they had been born. But he labored in vain, because the children all died, for they could not live without the petting and the joyful faces and loving words of their foster mothers.

Patton, Gardner, and Richmond (1963), writing on maternal deprivation, account from their experience that:

> . . . the syndrome of growth retardation--delayed osseous maturation and retardation of motor and intellectual development--has often been associated with growth disturbances of the child's social and emotional growth as well as mental and social growth, which make quick initial improvement upon removing the child from a situation of maternal deprivation, but that the children so affected early in their development tend to remain below the age norms even at seven years of age [p. 5].

Wolff (1946), commenting on research by him and Hetzer, believed that the one-year-old child of poor milieu has been found one month behind the average in understanding human behavior and mimicry.

The language disability of the deprived child seems to be one of the main difficulties of the child's development. Wolff summarizes findings from both Descourudies and Goodenough, where the children, who were deprived of adequate mothering between two and seven years of age, were shown to be retarded eight months in language development. It may be assumed that this retardation of language function in the child's early years generalizes to all areas of mental development with a lasting effect.

There has been a great deal of laboratory work on sensory and maternal deprivation. Hebb (1958) and Thompson and Melzack (1956) have conducted studies where dogs were isolated from all human contact. The conclusions generally revealed that social isolation does not affect physical growth in dogs but tends to cause them to appear immature, puppy like, and to lack ability to do things that nonisolated litter mates could do rather easily. There is further evidence to show that the effects of isolation are present for several years after the restriction has terminated.

Harlow (1960) has also shown that when infant monkeys are separated from their mothers, they typically go through distinct stages, becoming depressed and unwilling to eat, often reverting in behavior to earlier stages of development. Numerous other studies by other investigators tend to show that deprivation of even light or sound causes unusual behaviors in animals, generally physical and behavioral retardation.

In any beginning discussion of social deprivation concerning maternal care, or lack of it, on the developmental picture, one is faced with differentiating abnormal mothering from no mothering at all. Both are clearly examples of limited maternal relationships and do not seem to show significantly different outcomes on the child. The difference may be only one of degree of deprivation, but then it would not be safe to assume that generalizations can be drawn from the amount of love, or the

fact that it is given by a foster or a bloodline parent, or the conditions under which maternal effect is given. Griffiths (1954), in speaking of the mother-child relationship, states:

> He is endowed at an instinctive level with the ability to move towards or accept the source of nourishment. He similarly demands and secures protection and attention. This comparatively simple situation, the early relationship between mother and child, constitutes the first simple, social fact and, as the child grows, the relationship itself develops into the earliest true social relationship between two human persons. This first simple social fact would appear to be the most important and far-reaching circumstance in the whole of human development [p. 13].

Griffiths quotes studies from Bowlby (1949), Klein (1932), Bukler (1930-1940), Bridges (1931-1932), and Isaacs (1930, 1932, 1933, 1948) which she feels indicate that young children can be expected to develop normally only when they are surrounded from birth by an "aura" of affectionate understanding and emotional security. The conclusion of her findings or feelings (speculation) is that too many changes of environment may seriously affect a young child's intellectual development.

Fling's text (1959) is devoted in its entirety to the theme of infant security. The author believes that the mother is the basic source of stimulation for the child in early emotional, social, and mental development. Any distortion of the mother-child relationship causes a baby to become anxious. This realm of primary anxiety is what Bowlby (1961) has reference to as "separation anxiety" or the initial source of social conflict, and a key to later maladaptive behavior. Ribble (1943), in her interesting book, writes:

> Infants who do not have a direct emotional attachment to the mother show various forms of distorted behavior either in their eating and elimination or else in their speech or locomotion . . . Later on in life these children have great difficulty in building up their first relationship with other members of the family group and are thus unable to find the emotional outlet which they so urgently need [p. 62].

Bowlby (1961) summarizes evidence presented by the various studies stating that there can be little room for doubt concerning the grave and far-reaching effects of prolonged maternal deprivation. He and Ainsworth (1954) have offered three orders of maternal deprivation to try to clarify the concept:

1) a lack of any opportunity to form an attachment to a mother figure;
2) deprivation for a limited period of at least three months and probably more than six months during the first three or four years of life;
3) a discontinuous relationship with one or more mother figures during the first three or four years.

Although many of the studies concerning maternal deprivation have been attacked on just grounds (poor design and lack of statistical evidence), Fling (1959) has this to say:

> . . . attacks on Ribble's psychological and medical assumptions, and on Spitz's research design and lack of statistical proof, may make a pure scientist glow, but serve only to alienate the clinical child psychologist who has been convinced by what he sees, that the general proposition regarding maternal deprivation and the psychological importance of mothering is true [p. 46].

The terms deprivation and separation have tended to become interchangeable and synonymous. What seems to be important is that all children should have the opportunity to experience a warm, intimate, and continuous relationship with a mother figure, be the mother genetically true or a substitute. To avoid a semantic argument, love as a term should be used sparingly, as it may be that the central ingredients of a mother-child relationship are acceptance and comfort on the part of the mothering adult.

Institutionalization: Studies on the Effects of Multi-Mothering

Knox (1949) concluded from a study made in 1915 on early institutionalization of neglected children that despite adequate physical care, 90% of the children died within one year of admission. Spitz and Wolf (1946) found that 15% of the children reared in institutions developed unusual behavior characterized by crying and indifference to adults. "The children would lie or sit with wide-open, expressionless eyes, frozen, immobile faces, and a far-away expression as if in a daze, apparently not perceiving what went on in their environment [p. 114]." Spitz and Wolf referred to this dependency-related syndrome as "anaclitic depression." It appeared at the onset of mother-child or mother-substitute-child separation and would continue indefinitely if the deprivation lasted longer than five months.

In another study Spitz (1946) observed children placed in an institution for the first two years of life. He found that the last four months of the first year were marked by a slow developmental rate if the situation were a deprived one. Two years following the initial observations of this study, he found them to be noticeably retarded. There are several possible ways to account for the loss of intelligence in institutionalized children: lack of sensory and language stimulation, dull peers, inadequate mothering, and inadequate social instruction. The ready and available answer that the children lacked ability to begin with is not acceptable in the face of existing evidence.

Kagan and Moss (1962) revealed that five-year-old institutional children receive 85 orders in the same period of time during which the family child receives 21; the two-year-old family child asks 69 questions during the day, while the institution child asks 10 questions. The family child gains 28 explanations for his efforts, the institution child but 3.

In most examinations of the fluctuation of IQ scores where preschool children are sampled, the range seems to vacillate as high as

20 points above or below the mean in test-retest situations. Even so, Spitz and Wolf (1946) found in reviewing all the studies to date that where a marked lag in developmental quotients appeared, there was a definite trend toward greater impairment when the mother figure had not been present for prolonged periods.

Both Bowlby (1961) and Goldfarb (1945), in carefully controlled experiments, found an IQ point difference of 28 in three-year-old children placed in foster homes as compared to those placed in institutions. Eleven years later, there was still a statistically significant difference (23 points) between the two groups in favor of the children who had been placed in adequate homes before the age of three. The cultural variable present in most intelligence tests has been found to handicap some children; therefore, it may not be wise to utilize intelligence as a criterion in assessing the effects of maternal deprivation. For this reason, if we look at other behaviors generally, we can still draw interesting comparisons.

Fling (1959) reports that in measuring the adjustment of institutionalized children in terms of their adaptive behavior, ". . . security scores of the institutionalized infants are consistently lower than those of the well-adjusted babies [p. 31]." Thus, from the study above, it seems that if the better adjusted children in an institution are compared to the better adjusted children in a home (foster home), the difference in terms of social adjustment is always in favor of children who have had a consistent mother relationship.

A more recent study (Provence & Upton, 1962) of institutionalization and its effect on children was undertaken simply to qualify the "better" or "worse" comparison of institutionalized children with family children. Seventy-five children were studied over a five-year period. The children ranged in age at the beginning of the study from four days to six years. This study concluded that the infants reared in the institutions were different in respect to autocratic activities such as the discovery of

their own bodies and as the first step in the development of a concept of self. These authors, like everyone else thus far, consider the typical rocking, autistic, isolated behavior of these children to be caused by maternal deprivation. It is interesting to note from this study that the IQ's of the institutionalized children fell 24 points in four to five months' time on three different infant tests.

Most of the work on the effects of institutionalization has been completed with mentally retarded subjects. There is little available information on any transfer of findings from these studies to non-retarded delinquents. An in-depth attempt to survey the studies on the effects of institutionalization reveals that in recent years Zigler (1963) has developed several interesting hypotheses concerning social deprivation and cognitive development that suggest important implications for the management and diagnosis of all children in institutions. Butterfield and Zigler (1970) have demonstrated that IQ changes reflect changes in debilitating motivational factors reflecting preinstitutional social deprivation rather than changes in cognitive functioning. The significant fact is that different institutions had greater or lesser influence reported in the amount of positive IQ change following institutionalization. The chronological age at the time of placement was also determined to be a significant factor, children younger than three years showing greater growth response to institutionalization.

Investigators, finding significant relationships between institutional experience and measured IQ in the past, have inferred that IQ changes reflected changes in cognitive functioning. If the IQ decreases following institutionalization, it was argued that the institutional environment was less intellectually stimulating than the pre-institutional environment. Similarly, interpretive emphasis on intellectual stimulation and cognitive functioning ignores the fact that intelligence test performance frequently reflects many motivational and achievement factors.

Zigler and Williams (1963) have demonstrated that changes in social motivation may underlie changes in the IQ's of institutionalized retardates. They found that the vast majority of the retarded subjects sampled showed IQ decreases following five years of institutionalization and that the magnitude of the children's IQ decreases was positively related to a measure of their desire to interact with adults. They hypothesized that institutionalization does not affect cognitive functioning but rather heightens a child's motivation resulting in an interference with effective responses to the intelligence testing situation. Findings by Balla (1967) and Harter (1967) are consistent with this hypothesis. Balla found that institutionalized retardates experienced relatively little social interaction with adults, and Harter found that institutionalized retardates performed worse on a learning-set test when an adult with whom they could socialize was available than when the adult was less available.

Butterfield and Zigler (1970) found that children who came from socially depriving preinstitutional backgrounds had smaller increases in social motivation following institutionalization than did children who came from relatively nondepriving backgrounds. Thus, institutionalization should affect the IQ of the child from the relatively good preinstitutional background more adversely than the IQ of the child from a socially deprived preinstitutional background.

Clarke and Clarke (1954) discovered that the IQ's of retarded children from more adverse family backgrounds increased following institutionalization, whereas those from more adequate backgrounds remained unchanged. This finding is consistent with the view that residence within an institutional setting ameliorated the effects of the preinstitutional social deprivation of the children from adverse backgrounds and, thereby, indirectly resulted in higher IQ's. Let's continue the possible parallelism between mental retardation and delinquency. Less than 30 years ago, Doll (1946) felt it was not

difficult to identify that the predominant theme toward the mentally retarded was their incurability. More recently, the views of most disciplines concerned with mental retardation are that it is not a disease nor a result of any single cultural, genetic, environmental, physiological, or related biological problem and that it can be remedied in part or fully through corrective therapies. Such speculation has caused active legislation for the training of teachers, psychologists, social workers, and physicians. Program development units were funded, mental retardation centers initiated, and classes for the mentally retarded begun.

The rendering of many services to retarded people assumes that certain environmental modifications can favorably affect their development. Many workers have believed that the general environmental condition is a primary contributory cause to mental retardation. This, then, raises the serious question on the control of such environments as in institutional settings. It has been well documented that the retarded individuals in institutions present a much more serious adjustment problem than the noninstitutionalized retardates; that is, they are basically more difficult to manage before they enter the institutional setting. They have lower IQ's, represent broken homes and disturbed families, and have also had the unique experience of being institutionalized, which in itself causes an adaptive reaction. The research literature on the effects of institutionalization and intelligence is well summarized by Butterfield and Zigler (1970):

> Institutions probably have most detrimental effects upon verbal and abstract abilities. These effects are probably more marked for younger retardates and for retardates from more favorable home environments. Retardates from very adverse backgrounds may benefit from an institutional environment.
>
> All of this suggests that one of the most beneficial things an institution could do for its retarded residents would be to increase opportunities for verbal expression. Highly trained personnel probably are not needed for this; simply providing

> a greater number of child care workers who talk directly and frequently to their charges would probably help a great deal [p. 125].

More closely associated to delinquency are those factors relating institutionalization to the retardate's personality growth. The studies on retardate personality are based upon the view that to gain normal personality development, one must experience sufficient positive interaction with adults (gradually becoming more oriented toward achieving independence and less needful of immediate emotional support). That is, children, whether retarded or normal, who do not receive sufficient positive adult contact (as they probably do not receive sufficient social contact in institutions), will remain immaturely oriented toward receiving attention from adults. Consequently, they will not become sufficiently motivated to achieve independence and make a satisfactory adjustment as an adult. Butterfield and Zigler (1970) suggest that:

1) The studies relating environmental influence upon retardate personality suggest that one of the hallmarks of a desirable institutional environment is the provision of intimate positive contact between adult caretakers and residents;

2) Empirical evidence seems to justify a strong plea for increasing the number of attendants per patient in institutions for the retarded; but

3) More attendants do little good if they fail to interact appropriately with the residents. Just what the proper interaction is may be difficult to say on the basis of the studies reviewed;

4) Intuitively, however, if attendants tried within the very realistic limitations of their jobs to interact frequently, realistically, and warmly with their patients, they probably would be close to the ideal;

5) Adequate personality development would likely be helped by employing both male and female attendants for patients of both sexes.

Inadequate Mothering: Affective Neglect

Inadequate mothering results when the child is placed into a foster home where he experiences affective or physical neglect or is deprived of the security previously talked about from his genetically real or bloodline mother.

Although Goldfarb (1945) did his initial studies of deprivation with institutionalized children, he makes a comment that seems quite meaningful to any hard look at parental deprivation. "It is important to note that inadequate satisfaction of the dependency needs, not complete deprivation, is sufficient to produce this failure of affective development [p. 252]." Goldfarb's concern is for the child's growing awareness of independence or interself dependence, ". . . both the 'I' of the inner life, and the 'it' of the outer life, are crippled [p. 252]." In other words, his concern is that when a child fails to develop a feeling of acceptance and independence for his own life as well as for the lives of others about him, he will fail to find an identity of self [p. 252]."

Wolff (1946) summarized the theoretical position most widely accepted on personality development in writing that all expressions of personality by the young child seemed to be attributes of one item--the child's search for his "self." He adds that the child does not explore the world only in order to gain knowledge but also to differentiate himself from his environment.

In London, Bourne (1954) developed a conceptual framework to account for psychogenic amentia. In a study of 154 children, 6 to 90 months in age, admitted to a hospital, he determined that 138 had physical or organic reasons for mental retardation. He then studied 34 of the organic children and the 16 nonorganic children. A portion of the organic group, referred to as qualitative, was classed as such because the mothers were known to be severely abnormal psychologically, notoriously psychopathic, or reckless dullards. He found that 12 of the 16 nonorganic cases (75%) had been subjected to pathological mothering,

the children having been deprived of a mother figure for an unduly long time (5 to 8 months), as compared with only 6 organic cases (15%). This study did not account for the birth of nonorganic children to parents who themselves might be filially retarded. It would appear on the basis of this study that poor or bad mothering is worse than no mothering at all, although the most logical speculation would be that school readiness can be depressed through inadequate mothering.

Stott (1962) studied 105 children, aged 8 to 15 years, who were attending programs for children failing public schools educationally. All the subjects appeared to have normal intelligence. The records were examined, and additional interviews were held with the parents. It was found that 14 of the 105 children showed histories of early abnormal mothering. In the case of each of these children, however, there were other possible causes of mental subnormality. The critical question seems to be more confused than ever. The problem is that no one wants to place pre-test children for research purposes into a known situation where they will receive inadequate mothering.

Speer (1940) studied 68 children who were physically normal but had lived with retarded mothers up until the time of their mothers' deaths, as opposed to 57 physically normal children whose mothers were normal in intelligence until the time of their deaths. The data indicated that IQ's depreciated rapidly for children who were permitted to stay with their retarded mothers past the age of two years. IQ depressions as low as 53.1 points were noted in the case of 12-year-old children who had been left with their retarded mothers to that time. It would seem that when the children are taken from homes before the age of two or three (the onset of functional language), the IQ of the child will approximate the IQ of the foster home parents.

It is true that most researchers who tend to point to the environment as a source of stimulation or deprivation forget about statistical regression. It seems that a warning of the many pitfalls that

await the reader of studies in this dubious area exists. Even with the most objective consideration in mind, a review of a study of twins who were reared in different environments (Newman, Freeman, & Holzinger, 1937) should at least permit the convinced environmental skeptic that cultural differences do exist. Newman, et al., found in 19 pairs of twins, separated at less than two years of age and placed into foster homes, that the correlation of IQ's for twins reared apart was .77 as compared with a correlation of .88 for twins reared together. In terms of IQ difference, the 6 pairs who were in very unequal home situations showed an average difference of 15.2 IQ points. Wolff (1946) writes: "The child is in a state of fluctuation; therefore, the child's IQ is not an absolute, unchangeable unit, but depends on the situation in which it becomes manifest [p. 7]." Several authors have shown that children's IQ's become more like those of foster parents than real parents. Bayley (1954) has demonstrated that a child's ability approximates the educational level of the mother and father more frequently than the combined IQ of the father and the mother. There is little reason to document the arduous poundage of available research that seems to indicate that social class, father's occupation, parents' educational level, cultural surroundings, etc., are or are not related to changes in IQ or functions of the child's learning readiness for school. The danger is that we often look at selected changes in children's behavior, such as IQ, and rationalize why that measured phenomenon occurs with little thought as to how other developmental behaviors have fared. Wolff (1946) states: "The most decisive factor influencing any evaluation of intelligence is the emotional response which underlies or even substitutes for a reaction which is supposed to indicate intelligence [p. 7]."

In other words, the attitude of the child--the child's wishing or wanting to impress, to gain rewarded recognition--is clearly represented in most ability-of-achievement measures. By the same

token, the child's motivation or drive to compete for reward with other adults (teachers) is to some extent culturally influenced in the beginning school situation. The idea that development of most behaviors is continuously and fundamentally dependent upon environmental reinforcement is an additional important component frequently observed in delinquent children, a component which has not thus far been considered as the factor of motivation. Why else do most neglected or delinquent children also display patterns of academic failure?

Essentially, the most important single factor would appear to be the attitude of the mother as seen in her ability to express love and affection. Once again, love and affection would appear to be synonymous with parental acceptance. The literature supports the postulate that mothers who are unable to express sincere feelings frequently overprotect their children, forcing them to become dependent. The result is that dependent children are usually unable to develop independency without constant reinforcement.

The data reviewed by Roff (1949) suggest that the degree of intercorrelation between what the parents and child feel comprise a "good" parent-child relationship which is often the very basis for the relationship. It would seem that the parent-child relationship, especially between the mother and sons, accounts for the children's motivation to learn. This may well have its beginnings in the child's attempt to please the parent.

Kagan and Moss (1962) studied children whose IQ's ranged from 100 to 135, with a mean of 120, and found that the child's intelligence from age six on was highly correlated with achievement behavior and intellectual mastery throughout his lifetime. They write: ". . . the child's motivation to master intellectual skills is a major determinant of individual differences in test scores [p. 36]." Their data reveal a positive relation between an increase in IQ and intellectual achievement from age six on: ". . . boys with strong desires to master intellectual

skills gained in IQ scores during the early years of school, while those with low mastery motivations remained stable or showed slight decreases in IQ scores [p. 36]." They consider two factors in explanation:

1) Achievement is socially approved behavior,

2) Mastery behavior often leads to status acceptance by parents and parental surrogates, material rewards, as well as personal satisfaction and inner feelings of adequacy and competency [p. 37].

The predictive power of parental educational level, as a social or cultural class element, is offered to the children in any culture through the desires and relationship of the maternal attitude. A mother's wish tends to set the tone for what the child will wish to do in school (achievement). It certainly would appear that if striving for academic achievement causes changes in IQ, then our present predicators of academic success (intelligence tests) are being used incorrectly. It may be that if there is an adequate measure of motivation, it is the value of education held by the mother. Clearly, education not only has a cultural value but also the preparation for it is highly culturally related; if the home does not believe in it, there will be no preparation of the child for it. Moreover, the attitudes of middle-class parents are more like that of the teachers, at least the value pattern will be more similar than are the values of lower-class mothers and middle-class teachers. The dangers in these types of overgeneralizations are many. But, permit me one more: in a detention home setting, rarely are children seen who do not somehow indicate parental, and moreover, maternal rejection. The major dilemma associated with programs directed at habilitating or rehabilitating delinquency or neglect is direct work with the child. Maybe the parent or family should be the major recipient of these services.

"There is a divinity that shapes our ends,
Rough-hew them how we will. . . ."
[Shakespeare's Hamlet, V, ii.]

References

Ainsworth, M., & Bowlby, J. Research strategy in the study of mother-child separation. Courier IV, 1954.

Balla, D. The verbal action of the environment on institutionalized and noninstitutionalized retardates and normal children of two social classes. Dissertation Abstracts, 1967, 27 (12B), 4547.

Bayley, N. Some increasing parent-child similarities during the growth of children. Journal of Educational Psychology, 1954, 45, 1-22.

Bourne, H. Protophrenia: A study of pervereld rearing and mental dwarfism. Lancet, 1954, 2, 1156-1163.

Bowlby, J. Separation anxiety: A critical review of the literature. Journal of Child Psychology and Psychiatry, 1961, 1, 251-269.

Butterfield, E. C., & Zigler, E. Preinstitutional social deprivation and IQ changes among institutionalized retarded children. Journal of Abnormal Psychology, 1970, 75, 83-89.

Clarke, H., & Clarke, A. Cognitive changes in the feebleminded. British Journal of Psychology, 1954, 45, 173-179.

Doll, E. A. Is mental deficiency curable? American Journal of Mental Deficiency, 1946, 51, 420-428.

Fling, B. M. The security of infants. Toronto, Canada: University of Toronto Press, 1959.

Gesell, A. The first five years of life. New York: Harper and Brothers, 1940.

Goldfarb, W. Psychological privation in infancy and subsequent adjustment. American Journal of Orthopsychiatry, 1945, 15, 247-255.

Goodman, P. Growing up absurd. New York: Random House, 1960.

Griffiths, R. The abilities of babies. Warwick Square, London, England: University of London Press, 1954.

Harlow, H. F. Primary affectional patterns in primates. American Journal of Orthopsychiatry, 1960, 4, 676-684.

Harter, S. Mental age, IQ, and motivational factors in the discrimination learning set performance of normal and retardate children. Journal of Child Psychology, 1967, 5, 123-141.

Havighurst, R. J. Urban development and the educational system. In H. A. Passow (Ed.), Schools in depressed areas. New York: New York Teachers' College Columbia Publication, 1963.

Hebb, D. O. Sensory deprivation. The American Psychologist, 1958, 13, 109.

Itard, M. G. Wild boy of Aveyron. New York: Appleton-Century-Crofts, 1962.

Jones, H. E. The environment and mental development. In L. Carmichael (Ed.), Manual of child psychology. New York: John Wiley and Sons, 1954.

Kagan, J., & Moss, H. A. Birth to maturity: A study in psychological development. New York: John Wiley and Sons, 1962.

Knox, J. A plea for accurate statistics in infants' institutions. In H. Bakwin (Ed.), Emotional deprivation in infants. Journal Pediatric, 1949, 35, 512.

Montaqu, M. F. A. Constitutional and prenatal factors in infant and child health. In M. J. E. Linn (Ed.), Symposium on the healthy personality. New York: Josiah Macy, Jr., Foundation, 1950.

Mussen, P. H., Conger, J. J., & Kagan, J. Child development and personality. New York: Harper and Row, 1963.

Newman, H. H., Freeman, F. N., & Holzinger, J. J. Twins: A study of heredity and environment. Chicago: University of Chicago Press, 1937.

Pasamanick, B., & Lilienfeld, A. M. Association of maternal and fetal factors with development of mental deficiency, abnormalities in the prenatal and paranatal periods. Journal of the American Medical Association, 1955, 159, 155-160.

Patton, R. G., Gardner, L. I., & Richmond, J. B. Growth failure in maternal deprivation. Springfield, Illinois: Charles C. Thomas, 1963.

Provence, S., & Upton, R. C. Infants in institutions. New York: International University Press, 1962.

Prudhommeau, M. Pseudo-retardation. Enforce, 1961, 14, 17-56.

Ribble, M. A. The rights of infants. New York: Columbia University Press, 1943.

Riessman, F. The culturally deprived child. First Edition. New York: Harper and Row, 1962.

Roff, M. A factorial study of the Fels parent behavior scales. Child Development, 1949, 20, 29-45.

Sequin, E. Idiocy and its treatment by the physiological method. New York: Columbia University Press, 1907.

Sontag, L. W. Maternal anxiety during pregnancy and fetal behavior. Physical and behavioral growth. Twenty-Sixth Ross Pediatrics Conference, Columbus, Ohio, 1958, 21-24.

Speer, G. S. The mental development of children of feebleminded and normal mothers. Yearbook of the National Society for the Study of Education, 1940, 39, 309-314.

Spitz, R. A. Hospitalism: A follow-up report on investigation described in Vol. I, 1945. In The psychoanalytic study of the child. Vol. II. New York: International University Press, 1946, 2, 113-117.

Spitz, R. A., & Wolf, K. M. Anaclitic depression: An inquiry into the genesis of psychiatric conditions in early childhood. In The psychoanalytic study of the child. Vol. II. New York: International University Press, 1946, 2, 313-342.

Stott, D. H. Abnormal mothering as a cause of mental subnormality: II. A critique of some classic studies of mental deprivation in light of possible congenital factors. Journal of Child Psychology, 1962, 3, 79-91.

Thompson, W. R., & Melzack, R. Early environment: How do environmental influences at the beginning of life shape the behavior of an animal? Scientific American, 1956, 38, 194.

Wolff, W. Personality of the preschool child. New York: Grune and Stratton, 1946.

Zigler, E. Rigidity and social reinforcement effects in the performance of institutionalized and noninstitutionalized normal and retarded children. Journal of Personality, 1963, 31, 258-269.

Zigler, E., & Williams, J. Institutionalization and the effectiveness of social reinforcement: A 3-year follow-up study. Journal of Abnormal Social Psychology, 1963, 66, 197-205.

Chapter III

Diagnosis and Assessment of Delinquent Behaviors

Concentrated efforts to assess delinquent behaviors began in the 1950's with the Gluecks' attempts to design an effective instrument for screening a given population of juvenile delinquents. Like most researchers who have attempted to design prognostic tools in this area, they encountered a multitude of semantic, theoretical, and population problems. Semantically, the major questions remain: What is juvenile delinquency? or What indeed is the relationship of juvenile delinquency to a particular culture or subculture? These questions reflect the immense task in attempting to build and standardize measurement instruments that may be used with broad population samples. Therefore, the operational definition of delinquency usually is based on court action rather than the presence or absence of a particular behavior. Eleanor and Sheldon Glueck (1950) define delinquency as:

> . . . repeated acts of a kind which, when committed by persons beyond the statutory juvenile court age of 16, are punishable as crimes (either felonies or misdemeanors)--except for a few instances of persistent stubbornness, truancy, running away, associating with immoral persons, and the like. Children who once or twice during the period of growing up in an excitingly attractive milieu steal a toy in a 10-cent store, sneak into a subway or motion picture theatre, play hooky, and the like, and soon outgrow such peccadilloes, are not true delinquents, even though they have violated the law [p. 13].

This definition is consonant with the general trend in delinquency definitions, as Whelan (1954) notes: ". . . every definition of delinquency assumes a legal aspect and is dependent on the varying social norms and attitudes of each community and those individuals who carry out the legal processes [p. 432]." Court records and societal judgments are not usually available for nondelinquents, raising another question: Just how can the researcher be sure a nondelinquent is truly

law abiding? Perhaps he has the same traits or behaviors as the delinquent and simply does not get caught. [See also Glueck, E., 1956 a, 1956 b.]

Presumably, the rationale behind early identification of delinquents is to economize treatment efforts, or else society would expose all youth to whatever resources are available for delinquency control. In order for test construction economy to be achieved, the predictions must be accurate. This accuracy is thought to be dependent to a large degree upon the age at which prediction occurs. The Gluecks' classic scale of social prediction uses five factors of interpersonal family relationship purporting to predict delinquency from age six. The efficacy of such a long-term prediction is questionable. Do not these same factors in the family change appreciably by the time a child becomes delinquent? In order to predict effectively from them, a predictor must assume that no really crucial etiological factors make their initial appearance after the original predictions have been made.

Reckless, Denitz, and Koy (1957) stated age twelve as a reasonable base age for prediction of future adolescent behavior. This base of twelve years was chosen for several reasons. It is an early adolescent age. It is the threshold age for official delinquency. (Before this age, few cases are brought to court for juvenile delinquency.) Twelve is the time of transition to junior high schools in the American cities. It is also the approximate time of life when young people can verbalize about themselves, either in interview or schedule inventory. The literature on delinquent groups appears to illustrate that members younger than ten are rarely recruited.

Accuracy of a predictive instrument is dependent, too, upon the size of the sample on which it was validated as well as such factors as the ethnic and racial composition of the population samples being tested. Balogh (1958) states: "The larger the groups are, the smaller will be

the probable distortion by chance factors, and the greater the likelihood that the findings will apply generally to similar groups [p. 617]."

A further problem in the research development of test instruments has been the need for empirical validation, prospectively, rather than testing on a known population of delinquents and retrospectively applying it to a given group for some well-meaning reason. Prospective application to different independent samples would seem to be called for to properly validate an instrument for predicting delinquency. This requirement has been a major handicap in the validation of the Gluecks' studies, in particular.

A further complication arises if a prognostic tool that has been standardized using extreme group design technique is used to make decisions for an ambiguous middle group of juveniles. When youths score very high or very low on most classification instruments, placement is facilitated. However, this middle group presents problems when one attempts to draw a final demarcation between delinquents and nondelinquents, as most tests are not sensitive to the wide middle range which comprises the largest percent of the population.

Hathaway and Monachesi (1957) point out the complications of certain tests which require either self-reporting or the accounts from official public records. They believe factors exist which reflect on the accuracy of such measures and place them in questionable circumstances. They state that what is needed ideally ". . . is the collection of data directly from the behavior of the subject himself before the occurrence of maladjustment--data which are not at that time subject to interpretation or selection by the subject or others in terms of the outcome variable [p. 5]." Surely, the multiplicity of these confounding variables makes obvious the underlying problems of discovering an effective prognostic tool for prediction of juvenile delinquency.

Several validation studies have been attempted during the past 15 years which can be examined for their influence on our present thinking.

Because of the Gluecks' copious reports on juvenile delinquency prediction scales, it would be natural to investigate their studies and findings first.

In 1950, with the publication of Unraveling Juvenile Delinquency, Eleanor and Sheldon Glueck began their search for a valid juvenile delinquency prognostic device. Originally, the Gluecks designed three 5-factor scales for prediction purposes--a scale of interpersonal family factors (the Social Prediction Scale), a scale of character structure traits based on the administration of the Rorschach, and a scale of temperament traits derived from psychiatric interviews. These scales were derived from those factors which were found to differentiate sharply 500 delinquents from the control group of 500 nondelinquents. On the basis that "standing alone it would . . . do as good a job of selecting potential delinquents as either of the other two tables or as any combination of the fifteen factors in all three tables (Glueck & Glueck, 1959, p. 8)," the Gluecks reduced their three scales to only the Social Prediction Scale for prediction purposes. Then, with the advent of the first prospective validation of their scale by Whelan (1954), the Social Prediction Scale was further abbreviated from the original five factors to three factors. Their rationale was that ". . . changes made in the original five-factor table are all in the direction of reducing the danger of false positive and false negative identifications and making easier the gathering and rating of factors (Glueck & Glueck, 1960, p. 218)."

Of the many validation studies conducted to date on the Gluecks' scale, very little data are provided on the actual validation of this instrument. The main reason is that most of these studies are retrospective in nature, dealing with known populations. Only two prospective studies--the Maximum Benefits Project, initiated in 1954 in Washington, D. C., and the New York City Youth Board's projects (Whelan, 1954)--are found in the literature. Both of these projects have

failed to discriminate efficiently delinquents from nondelinquents using the Gluecks' scale.

The Maximum Benefits Project, however, is not a very true application of the Gluecks' experience table, which was given to a random sample of boys entering first grade. However, the project was not designed to validate the Gluecks' Social Prediction Scale. Questions arise as to whether the Gluecks' Social Prediction Scale can actually be applied to 5- to 6-year-olds for delinquency proneness detection, as the authors state is possible; the instrument itself was standardized on boys whose ages ranged from 11 to 17 years. In any case, validation support for the Gluecks' work was not provided by the Maximum Benefits Project.

The New York City Youth Board's study would seem to provide the necessary criteria for a prospective validation of the Gluecks' measuring device. Since it was a longitudinal study, using first grade boys from high delinquency areas in which Negro and Puerto Rican children composed a large proportion, the investigation would appear to be a rigorous testing of the Social Prediction Scale. It would seem also to provide a measure of how well the table could be applied to a wide variety of racial and ethnic groups since the table had been derived originally from a Caucasian sample.

Results from this study seem discouraging. The three-factor scale was introduced midstream in an experiment (five years after Whelan's New York City Board investigation began in 1952). The three-factor scale--comprised of (1) mother's supervision, (2) cohesiveness of the family, and (3) father's discipline--was substituted because it seemed to offer greater accuracy.—The Gluecks' explanation that ". . . greater accuracy of the three-factor scale as compared with the original five-factor scale is due to the inconsistency of ratings of parental affection by social workers of different intellectual persuasion (rater reliability) and to the difficulty of making ratings for families where the father has long been out of the home (Toby, 1961, p. 11)."

Therefore, the two scales--(1) affection of mother for boy and (2) affection of father for boy--were eliminated. While this change in the instrumentation is legitimate, it is a fact that the design of the study would be sufficiently altered by it to result in the termination of the initial study and the inauguration of a new one using the new three-factor table. Whelan (1954) also found that "the abbreviated tables on which he reports do not do a good job of identifying potential delinquents and nondelinquents as the 'prediction' that all cases would be nondelinquent [p. 430]." "Use of the abbreviated test device results in correction predictions in 84.8% of the cases, while the accuracy of the forecast that all the boys will be nondelinquent is 98.7% [p. 427]." Keeping in mind the necessity for economy in evaluation, it would seem costly to use the Gluecks' Social Prediction Scale. Use of the Gluecks' Social Prediction Scale identified 70 of the 221 boys (31.7%) in the sample as potential delinquents requiring treatment. Such treatment efforts would be, in fact, unnecessary for 46 of the boys, or two-thirds of the treatment group. Furthermore, 1 in 5 (6 of 30) of potential delinquents are missed by the Gluecks' screening device and would not receive appropriate treatment (Voss, 1963, p. 428). The more appropriate question may be whether any agency interested in the prevention of delinquency can afford to use such an unreliable measuring device.

Voss also cites Shaplin and Tredeman and Reiss as anticipating other limitations of the Gluecks' instrument. Most of their arguments are based on the construction and standardization of the scale, using an equal number of delinquents and nondelinquents, or an extreme population sample. Voss calls for using samples of broader populations from which a reasonable approximation of the actual delinquency rates can be made which will allow the construction of a prediction table with prognostic power. As far as its applicability to other racial and ethnic groups (other than the original Caucasian sample), Voss reports the following:

> The predictive accuracy of the Gluecks' table was 100% for Caucasian and Puerto Rican boys and 92.6% for Negro boys predicted to be nondelinquents. On the other hand, the accuracy of the table was very low for those predicted as potential delinquents: Caucasians, 22.2%; Negroes, 36.0%; and Puerto Ricans, 36.4%. The predictions were correct for 76.5% (169/221) of the cases. . . . If this is the case, then one must conclude that the validity of the Gluecks' prognostic instrument is, at best, confined to lower-class Caucasian boys [pp. 428-429].

In the face of the above, it is surprising to find support of the Gluecks' Social Prediction Scale in such comments as those by Nina B. Trevvett, Executive Secretary of the Commissioner's Youth Council (and co-participant in a Glueck research project):

> It looks indeed as if, with these factor scales, the Gluecks have found the simple instrument which we have all been seeking. It is an accurate predictive device. It is simple to apply and leaves little or no room for rater subjectivity. . . . (E. Glueck, 1963, p. 179).

> . . . the Gluecks have not, indeed, found a valid predictive instrument for juvenile delinquency. Rather, they have begun development of a prognostic tool which is, in truth, only the first stage of development of prediction tables, namely, the establishment of criteria. The next major stage involves application of the criteria prospectively to an independent new sample (Voss, 1963, p. 423).

The second most widely publicized and used juvenile delinquency prediction device has been the Minnesota Multiphasic Personality Inventory (MMPI). Hathaway and Monachesi (1951) prepared Analyzing and Predicting Juvenile Delinquency with the MMPI, accumulating the relevant research up to that year. The underlying assumption of these authors is that ". . . delinquency is a symptom rather than a personality trait. This means that we expect to find a number of personality types among whom the symptom of delinquency is common [p. 7]." They feel that "environmental situations operate to reduce the validity of committed and recognized delinquency as a standard against which we can evaluate measured traits as predictive variables" so that "the best we can expect

is the identification in [a given youth] of personality patterns that have a usefully high probability relation to later recognized delinquency [p. 11]." This seems realistic, a combination of two measures--personality and environmental factors--from which juvenile delinquency could be predicted.

The MMPI consists of 14 scales, 4 of which test the validity of the individual being tested, and 10 of which can be compared to normative data on aspects of personality. The instrument itself is comprised of 550 statements covering a wide range of subject matter, from physical condition of the individual being tested to his morale and social attitude. The statements are to be answered True, False, or Cannot Say. The test rarely takes longer than 90 minutes to administer and can take as short a period of time as 30 minutes. No supervision is needed other than assurance of optimal cooperation by the subject.

Contributors to Hathaway and Monachesi's (1951) book--Copwell, Ashbaugh, Lauger, and Dahlstrom--as well as the editors themselves, stated a series of significant findings. The most prominent finding in a positive relationship between the recognized scale meanings and predicted delinquency was that:

> . . . the MMPI scales 4 and 9 (4, the syndrome of symptoms indicated by the diagnostic term psychopathic deviate; 9, the measure related to enthusiasm and energy) have an excitatory role in the actual members' predicting the development of asocial behavior [p. 36].
>
> . . . Also, those adolescents whose MMPI profiles show no high deviation and who are thus indicated to be normal are very unlikely to be found delinquent, and this finding seems to us to be more clearly substantiated in the data than is any positive probability trend [p. 137].

Mention was made of that ambiguous middle group in which final demarcation between delinquency and nondelinquency must be made. Hathaway and Monachesi (1951) note in respect to this problem that "identification of such an individual beyond that test findings would probably rest upon careful evaluation of the circumstance leading to the

antisocial behavior; such study would probably show the relatively inactive part played by the individual in question [p. 131]." In other words, in this middle group of juveniles, the authors feel that the individual is acted upon by environmental circumstances which must be further evaluated in order that accurate predictions can be made. One test, then, does not give all the answers.

A major handicap of the MMPI in determining delinquent propensities would seem to be the need for specially trained personnel to carry out interpretation of test results. Although the MMPI is restricted in its distribution by ethical rules which govern its use, such control does not give adequate assurance that incompetent interpretations will not be made. Hathaway and Monachesi (1951) state: "The ability to interpret profiles is much improved by practice [p. 25]." This fact alone should be borne in mind when interpretations are read so that misreadings are less prevalent.

Kvaraceus (1961) has also devised prognostic instruments for prediction of juvenile delinquency--the Kvaraceus Delinquency Proneness Checklist (KD Checklist) and the Kvaraceus Delinquency Proneness Rating Scale (KD Scale). The checklist is a list of 70 background variables which delinquents have in common. This form is generally filled out (Yes or No answers) by the juvenile's teacher. The KD Scale is constructed along the lines of a series of four-choice multiple-choice questions. There is also a nonverbal form of the KD Scale which consists of 62 circles, each divided into four quadrants; in each quadrant is a stimulus picture. The subject is asked to select one of the four pictures which he likes the most and one of the four pictures which he likes the least.

Of the studies reviewed--Balogh, 1958; Bechtold, 1964; Kvaraceus, 1961; Clements, 1967--using instruments designed by Kvaraceus (1953), the general conclusions reached are similar to the one stated by Bechtold (1964): "The most immediate need is that of long-term validation studies [p. 415]." Although these studies have found that

"the KD Scale and Checklist are valid predictive instruments for use in the prevention of delinquency," it was similarly observed that "one should keep in mind the predominantly Negro and lower-class composition of the subjects and the method of their selection (Bechtold, 1964, p. 414)." It was also observed that the sample size was not controlled. "The universe that Kvaraceus used in his Scale was," in the opinion of Balogh (1958), "statistically insignificant [p. 615]." Even Kvaraceus' own validation study of the nonverbal form of the KD Scale showed "the nonverbal scale cannot now be considered a functional tool that can readily or easily be incorporated in a school-community program of delinquency prevention via early identification (Balogh, 1958, p. 615)."

In short, then, the findings from studies using Kvaraceus' juvenile delinquency prediction tools would seem to indicate, like previous tools discussed, a need for long-term, randomly sampled, prospective validation studies. As Balogh (1958) concluded: "It is strongly urged that additional studies be made so that more accurate statistical refinements can be made toward a final statistical validation of the Kvaraceus Delinquency Proneness Rating Scale [p. 618]."

Several points mentioned by Kvaraceus (1961) seem worth covering in relation to possible correlates of juvenile delinquency.

> Reading ability . . . must be taken into account as a potential factor closely tied in with the delinquency symptom. Attention to the poorest readers in the junior high situation may enable the community to focus on a group of youngsters who are already, or who will soon be, showing behavioral disturbances [pp. 434-435].
>
> [Secondly,] the behavior ratings of experienced teachers showed more promise (than the KD Proneness nonverbal [Rating] Scale) as a method for identifying future norm violators. The fact that teachers' behavior ratings showed more promising results . . . tends to substantiate the observation that "nothing predicts behavior like behavior." [However,] operation of the self-fulfilling prophecy . . . should not be overlooked [p. 434].

These two factors of teacher ratings, as well as the child's reading ability, should be borne in mind in future research.

Other instruments have been tested for juvenile delinquency prediction. These include the Porteus Qualitative Maze Test, the California Personality Test, the PED Test, Arrow Dot Subtest, and Self-Concept as a predictor of juvenile delinquency. Validation on these devices, however, is in the same stage as previously mentioned devices are; further research is necessary in order that it be shown that these instruments measure what they purport to measure.

Docter and Wender (1954) attempted to obtain normative data on an independent sample of matched groups of delinquents and nondelinquents using the Porteus Qualitative Maze Test. These authors refer to Porteus, Wright, and Grajales as having "revealed very significant differences between the qualitative performances of delinquents and nondelinquents [p. 71]." Porteus has described a qualitative method for scoring the maze test which appears to reflect differences in test behaviors of delinquents and nondelinquents. This scoring scheme is based on an evaluation of the subject's regard for instructions, carefulness, impulsivity, etc. It is a measure of expressive movements. The entire series of mazes was utilized for each subject.

Porteus, in his testing of the maze test, suggested a cutoff score which consistently differentiated delinquents and nondelinquents. In this regard, the authors state "the test shows promise of having predictive value" and "Porteus' weighing scheme can be rationalized and used but does not seem to add to the efficiency of the test [p. 73]." If, then, the basic interest is designing a test to differentiate delinquents and nondelinquents, the test is developed for its predictive value. It would seem that the major criticism of the Porteus Test's validation would be the lack of a longitudinal, prospective study on a large, independent sample. Here, again, we find the need for further research.

A follow-up study was conducted by Rankin and Wikoff (1964) demonstrating the utility of relating the Porteus Test to the Arrow Dot Subtest taken from the PED Test on the basis that "the material of the Arrow Dot Subtest is probably more interesting to adults, its scoring and administration are simpler and more objective [p. 207]," and they both measure similar personality dimensions. This study was carried out on a population of 121 known criminals and college students. It was found that the Arrow Dot Subtest discriminated between inmates and college students with "impressive" precision. The final comment by these authors is the fact that "both the Arrow Dot Subtest and Porteus 2 are successful in discriminating delinquents from nondelinquents and both seem to have a common thread which might be called 'rule following' or 'goal fixation' and may provide a lead in identifying dimensions that differentiate between delinquents and nondelinquents [p. 210]." Again, we run into the need for further study--prospectively to assure the Arrow Dot Subtest's predictive utility and validity.

Lively, Denitz, and Reckless (1962) designed a study of the self-concepts of twelve-year-olds as a predictor of delinquency because they felt that it was desirable to obtain assessments of the direction of social growth from young people themselves. A total of 1,171 students from an industrial city in Ohio were used as subjects. Each of these students filled out a schedule of scales to measure socialization, concepts of home and parents, concepts of the father, concepts of law and order, delinquent activity and concepts of self. Information was also provided by interviews with a qualified member of the school staff. A longitudinal study was then conducted on a cross-sectional population to determine the stability of self-conceptions and socialization (instead of using longitudinal studies by test and retest of the same individual children). No significant change in concepts of self and others occurred during the four-year interim. The authors conclude "once internalized in

preadolescence, these images or orientations tend, in the absence of major external modifications, to be resistive to change [p. 167]."

A trend was noticed which indicated that there was a marked association between scores on the socialization test, "legal terms," general home and parent items; and father items, with individual scores on the delinquency checklist. Lively, et al., (1962) finally concluded that ". . . direction of socialization and self-concept are important indicators of veering toward or away from delinquency [p. 161]." Perhaps this self-concept test could become a robust juvenile delinquency prediction instrument; the problem is that it, too, needs further validation. Presently, the "state of the art" in the diagnosis or assessment of delinquent behaviors is severely restricted by a lack of available instruments. An exhaustive review of existing tests would only substantiate this point. Therefore, the remainder of these chapters will report on the tests most commonly used and their present states of validation.

Instrumentation

An overview of the instruments used to identify delinquents is included in this section. The purpose of describing them is to acquaint the reader with the age, response type, and objectives stated by the authors. The reliabilities and validities are also reported, indicating once again the need for rigorous validation of many of these measuring devices. The scales, tests, and survey instruments discussed are not exhaustive of all those which can be used with delinquent children. In addition, no index or reference on measurement is made under the heading of assessing the dimension of human neglect as an adjustment phenomenon or trait, nor is there any reference to neglected youth. The reader will observe that many of these measures are designed to profile personality dimensions or plot the constructs associated with psychopathology. These instruments have not necessarily been

readapted for use with delinquents; rather, a given parameter has usually been designated as an important variable relating to delinquency. The instrument in question then becomes a research device used for empirical purposes. Most of the instruments reported on would be far more aptly used to collect research data than to make decisions or predictions concerning the presence or absence of delinquency. There appears to be very little direct behavioral or instructional vacillation resulting from the scores or profiles of most of these measures. It may be that delinquent youth should be administered standard measures, especially academic achievement ones. But, in the absence of any comparative data, it may be that institutionalized delinquents should receive different types of test items more akin to their various subcultures, and that the normative data used to assign scores be based on similar samples of children.

The Gluecks' Prediction Tables

The Gluecks (1959) have developed three prediction tables, one of which, "Social Factors," has undergone intensive and long-term evaluation. The narrative basis of these tables draws on a population sampling of 500 delinquents and 500 nondelinquents.

The Social Factors Table has now undergone a ten-year validation. Trained home interviewers gathered factual and observed data on five subtest variables (discipline of the boy by his father, supervision of the boy by his mother, affection of the father for the boy, affection of the mother for the boy, and cohesiveness of the family unit) on a sample of 224 boys entering the first grade in 1952-1953. This sample was later increased by the addition of 76 boys. Criterion data were obtained through a comprehensive follow-up of all boys in the study.

Results have been presented for two- and three-factor scales which the investigators suggest are more refined instruments for early selection of potential delinquents. The three-factor scale includes:

(1) supervision of the boy by his father, (2) supervision of the boy by his mother, and (3) family cohesiveness; the two-factor scale retains: (1) supervision of the boy by his mother and (2) family cohesiveness. The Gluecks' Social Prediction Table, after nine years of study and experimentation, has shown evidence of being a good discriminator between potential delinquents and nondelinquents. The three-factor scale obtains 70% accuracy in predicting delinquents and 85% accuracy in predicting nondelinquents.

The Gluecks (1959) have been criticized on several counts in constructing these scales. These criticisms are:

1) Their studies were completed in the highest delinquency area in New York City;
2) The ratings of the social workers making the assessments on the five major variables ascertained by the scales were subjective;
3) The family cohesiveness and supervision variables, for example, like many of the others, were highly culturally dependent, having little significance in lower-class families;
4) Statistical treatment of the data was highly questionable with over-claims resulting;
5) The family-rating approach itself was cumbersome, expensive, and required a great deal of social work manpower.

Bristol Social Adjustment and Prediction Instrument (BSAPI)

Stott (1960) offers an alternative method of assessing the personality attitudes of delinquents. This instrument--the Bristol Social Adjustment and Prediction Instrument (BSAPI)--is based upon the comparative incidence of certain symptoms of nondelinquent behavior

disturbances among probationary officers and controls obtained by means of the Bristol Social Adjustment Guide (BSAG). This instrument developed a preliminary subject discrimination technique using six yes-no questions covering the syndromes of behavior disturbances found to be most frequently associated with delinquency. Children found to rate high on the BSAPI screening instrument are then assessed using the entire BSAG. The author estimates that this procedure can successfully denote 70% of the would-be delinquents within a given population. The scoring of the BSAG requires seven minutes for a maladjusted child. Another two minutes are then needed for the BSAPI on the screening procedure using the precision instrument. The scale was validated in England and should await validation studies based on American samples before being used in this country. Therefore, its most appropriate use is for research purposes at this time.

Minnesota Multiphasic Personality Inventory (MMPI)

The MMPI has become a rather standard reference measure which is responsible for voluminous research. Developed by Hathaway and McKinley (1943), the MMPI consists of an individual and group administration form, and it yields fourteen scores. These scores are: (1) hypochondriasis, (2) depression, (3) hysteria, (4) psychopathic deviate, (5) masculinity and feminity, (6) paranoia, (7) psychosthenia, (8) schizophrenia, (9) hypomania, (10) social, (11) question, (12) lie, (13) validity, and (14) test-taking attitude. A new group form eliminates the test-taking attitude and social scales, shortening the test from a total number of 566 items to 399 items. A major criticism of the MMPI is that it does not measure psychopathology but rather the social desirability value of the test items or the person's response perspectives to them. Another major difficulty is that the age range is 16 and older, and the user must be sophisticated in the interpretation of the scores. It would appear that many of the test items are outdated at

this time. When the test is used with younger adolescents, it loses its sensitivity because of their inability to verbalize themselves or the situation in which they find themselves. The strength of this test is its empirical derivation and the constant validation to which it has been submitted.

Hathaway and Monachesi (1951) have reviewed the various studies in which delinquents have responded to the MMPI, including their own two-year follow-up study of high school boys and girls who took the MMPI. More than 4,000 pupils were tested by the MMPI. Two years later, 591 of those completing it had been arrested by the police or had court contact or both. A study of the delinquent profiles indicated promise in several scales for prediction of delinquent behaviors. The scales for moral psychopathic tendency and hypomanic propensity were the best indicators of antisocial behavior. Neurotic adult profiles seemed to have a protective or inhibiting effect against the development of norm-violating behavior.

The major criticisms of the MMPI are:

1) It was originally constructed for adults;
2) It contains items to which parents and teachers object;
3) It requires considerable clinical skill if it is to be interpreted.

However, it is still a better discriminator of group differences, even though it does have serious limitations in offering individual predictions of psychopathology.

The Kvaraceus Delinquency Proneness Rating Scale and the Kvaraceus Delinquency Proneness Checklist

The Kvaraceus Delinquency Proneness (nonverbal) Rating Scale (Kvaraceus, 1961) has undergone a most extensive validation with delinquents. It is comprised of 62 circles, each holding four pictures based on concepts centered around reported differences between

delinquents and nondelinquents. The subject is required to indicate the pictured item he "likes the most" and the one he "likes the least." The validity data have been gathered in a careful three-year follow-up on 1,594 students in junior high school (grades 7 to 9) and on a small sample of retarded youngsters in special classes. Criterion data were drawn from the behavioral adjustments made by the pupils in school, neighborhood, and community over the same time sample. The predictive efficiency of the instrument was studied by sex and grade, using the following four-point scale: (1) never offending, (2) minor violations in school, (3) minor violations in school and community, and (4) serious offenses--including police and court records. Significant differences in a rank-order continuing of means were noted in certain grades for boys and girls using the four criterion groups. A lack of consistency in the data indicated that caution must be exercised in the employment of this instrument for human decision making. Interestingly, it was noted that teacher nominations based on pupil behavior proved to be equally as effective, and in some cases more effective, as predictors of future delinquency than did this test. A very interesting point that should be raised as an empirical question is: Can teachers, with and without specific in-service training, detect delinquency-prone children?

A Two-Step Process for Identifying Emotionally Handicapped Pupils

Lambert and Bower (1961) offer a practical method for identifying emotionally disturbed children from the general school population. The procedure entails two separate steps and a massive amount of paperwork. These steps are:

1) the use of screening procedures to identify children who are having difficulty in school because of suspected emotional disability; and

2) the identification of children in this selected group whose emotional disabilities are sufficiently great to cause them extreme adjustment difficulty in school.

Three types of measures were developed for the initial screening step (Step 1). These screening measures were designed to gather perceptions of the child's interacting in the classroom. They are:

1) his behavior from the teacher's perception of day-to-day reactions;
2) the classmates' perception of their fellow pupil's school behavior; and
3) the child's self-perception.

With the use of a ranking method based upon previous studies, pupils who score above a certain rank on any two or three of the screening measures are indicated as those who are likely to be handicapped emotionally and are thus referred for further diagnosis. This selected group generally includes from 10% to 15% of the school population.

The specific instruments developed for screening purposes include the following:

Teacher Ratings:	Behavior Rating of Pupils	(all grade levels)
Peer Ratings:	Class Pictures	(primary grades)
	Class Play	(elementary grades)
	Student Survey	(secondary grades)
Self Ratings:	Picture Games	(primary grades)
	Thinking About Yourself	(elementary grades)
	A Self Test	(secondary grades)

The validity of this screening process has been subjected to many different tests. Some nine out of ten children who were identified through the screening procedure were found, on the basis of individual study, to have moderate to severe emotional problems. These instruments also picked up many (seven out of ten) children who had moderate to serious emotional problems and who had not been so identified or reported by the principal or the school psychologist. (See Bower, 1960.)

The California Test of Personality: A Profile of Personal and Social Adjustment

The California Test of Personality was designed to measure a number of personal and social adjustment components through a series of five questionnaires sensitive to children: kindergarten - 3, 4 - 8, 7 - 10, 9 - 16, and adults. The test authors were Thorpe, Clark, and Tiegs (1953), and the test is distributed through the California Test Bureau.

The five components are uniform throughout each series. The two principal components are Self-Adjustment and Social Adjustment. The Self-Adjustment component is further subdivided into six subtests: (1) self-reliance, (2) personal worth, (3) personal freedom, (4) feeling of belonging, (5) withdrawing tendencies, and (6) nervous symptoms. The score on Social Adjustment is based on six subtests: (1) social standards, (2) social skills, (3) antisocial tendencies, (4) family relations, (5) school relations, and (6) community relations. There are 8 questions at the primary level in each subtest, 12 at the elementary level, and 15 each at the intermediate, secondary, and adult levels. The test may be administered to groups, except that individual oral administration is recommended for the primary scale. All except the primary series are adapted to machine scoring.

Anastasi (1968) describes the validity and reliability of this test:

> The California Test of Personality resembles empirically developed personality tests; in its construction, however, content validation appears to have predominated. Separate scores are found in twelve areas, identified by such labels as sense of personal worth, withdrawing tendencies, social skills, and school relations.
>
> National norms are provided for evaluating these fifteen scores. Internal consistency reliabilities are reasonably satisfactory for total scores and the two subtotals, but reliabilities of individual subscores are too low to justify intro-individual profile analysis [p. 162].

Washburne Social Adjustment Inventory

The picture edition of the Washburne Social Adjustment Inventory was developed by John Washburne (1940) and is sold by World Book, Inc. This instrument was developed to assess the individual's adjustment to childish emotional attitudes and immature motives, revealing the extent to which he can make adaptations to his environment. Each of the 60 items describes a situation and a reaction to that situation. The procedure is an attempt to rate the subject by obtaining a description of his characteristic behaviors, the subject having been provided with a structured situation as stipulated by the manual. The author states that a subject's self-rating is possible with only a small loss of precision; however, this may be an exaggerated claim.

The inventory consists of an 8-page booklet including an answer sheet for the 122 items, most of which require dichotomous yes or no responses. The items are straightforward.

The purpose as stated is to determine the degree of social and emotional adjustment. It is scored for Truthfulness, Happiness, Alienation, Sympathy, Purpose, Impulse Judgment, and Control. There is also a Wishes subtest, the scoring of which, however, is stated to be not absolutely necessary. There is a separate manual of directions for administration and interpretation of the test results.

This instrument has been used in the differentiation of maladjusted youths and normals, but it suffers from the need for additional empirical testing, as do most such adjustment inventories. It is not clear if Happiness, Alienation, Sympathy, Purpose, or the other concepts are to be regarded as traits or if there has been any attempt at experimental or empirical definitions for them. Although subjects in mental hygiene settings may legitimately furnish a criterion group for these vague concepts of maladjustment, it is not equally clear that these concepts themselves are valid--that the traits themselves do exist in nature. Therefore, it cannot be determined if the concepts are being validly

measured by the test item. A convergent-discriminate validity study of these traits is necessary if they are to have experimental or empirical meaning as subtests. The other subtests--Purpose, Impulse Judgment, and Control--are not clearly delineated as concepts; and with the reference groups being so broadly defined, the only useful information from deviant scores is the recognition that a subject indicates poor adjustment on these measures. The test appears to be useful as a screening device. The biserial correlation range is in the .90's; the test-retest reliability for college students is .92 when the administrations are separated by a six-month interval.

Scale for Evaluating the School Behavior of Children, Ten to Fifteen

The Scale for Evaluating the School Behavior of Children, Ten to Fifteen, was developed by Hayes (1943) as a device to help teachers to analyze objectively the habit patterns of adolescents and also to assist them to determine basic maladjustment. There has been no effort to validate it. The items were selected on the basis of polled opinions of two groups of judges; the ratings of pupils who were judged to have the most and the least desirable personalities indicated that the scale definitely discriminates between good and poor personalities. The author of the scale believed that the individual being studied is best able to judge his own personality characteristics. The scale only evaluates the child's personality in relationship to school-type tasks. It does not ascertain the child's non-school behavior or maladjustment which may have its origin in the conflicts aroused by some situation which is part of the non-school environment.

Behavior Cards: A Test Interview for Delinquent Children

A structured interview technique using behavior cards was constructed by Stodgill (1949) as an attempt to develop a useful test-

interview aid capable of identifying predelinquent and delinquent children.

The administration of the questionnaire required the subject to sort 150 items presented on individual cards, describing specific behaviors. The child was instructed to place the card in the box labeled YES if the behavior described him, and in the box labeled NO if it did not. The instrument required categorical responses from subjects, making it different from the usual paper-and-pencil test. The individual item cards called for a minimum reading level of fourth grade.

The average reliability coefficients between items and case study findings were reported as .68 and .72 for two groups of male delinquents, 50 in each group. A similar study for 50 female delinquents yielded a .52. Although the validation and normative data are available on small samples and the results are not available on a nondelinquent female group, sufficient information is presented to suggest that it is worthy of further research and clinical use where individual follow-up techniques will yield further validation.

The test-retest reliabilities are .92, .94, .83, and .85, which are surprisingly high for this type of instrument.

The Hostility and Direction of Hostility Questionnaire (HDHQ)

The Hostility and Direction of Hostility Questionnaire (HDHQ) is a British instrument developed in 1967 by Caine, Foulds, and Hope. It consists of 51 items from the MMPI that seem to reflect face validity sufficient to assess five subtests. These resulting five subtests are: (1) hostile acting out, (2) criticism of others, (3) projected delusional hostility (paranoia), (4) self-criticism, and (5) guilt. As could be extrapolated from the test items used, this test correlates highly with the K scale (paranoia) of the MMPI .58 to .66. The reliability of this 51-item test is predictably low. A test-retest range of correlation is .75 and .51 for the two parts of the test. The first three subtests were

assumed to measure extrapunitive manifestations of hostility, and the last two subtests were intended to measure intrapunitive hostility. No split-half reliabilities are reported. Validation through factor analysis isolated principal components, supporting at least one of the test authors' assumptions.

The major assumption underlying this device is that aggression and severity of emotional disorders are directly related. This is an interesting postulate, but one of pure speculation, unsubstantiated at this time by any hard research evidence. I see little reason to administer the HDHQ when the MMPI is available, at least until further research data can be supplied.

The Ego Ideal and Conscience Development Test (EICDT)

The Ego Ideal and Conscience Development Test (EICDT) was developed by Cassel (1969) and has two forms which report the results in the form of a profile. It is a paper-and-pencil test which makes little effort to validate the construct that the ego ideal and resulting conscience development in delinquents are different from their development in nondelinquents and that discrimination between delinquents and nondelinquents can be made on the basis of such a measurement. Reise (1969), in a master's study, did find evidence that this device can distinguish between delinquents and typical youth. The Ego Ideal and Conscience Development Test has nine subtests. These subtests are: (1) home and family, (2) inner development, (3) community relations, (4) rules and law, (5) school and education, (6) romance and psychosexual, (7) economic sufficiency, (8) self-actualization, and (9) a total score across all the other subtests. Reliability and validity studies are necessary before the user can feel confident that he is measuring a phenomenon that does occur in nature.

Walker Problem Behavior Identification Checklist

Walker (1967) has developed a six-scale teacher rating device for children in grades 4 to 6. Validity and reliability data are exceedingly limited. The six subscales of the Walker Problem Behavior Identification Checklist are: (1) acting out, (2) withdrawal, (3) distractability, (4) disturbed peer relations, (5) immaturity, and (6) total score. Until more substantial data can be supplied on these scales (or set of subscales), they must be interpreted with extreme caution.

The California Life Goals Evaluation Schedules

Hahn (1966) has developed ten schedules or goals to determine an individual's attitude toward desired future conditions. In essence, the California Life Goals Evaulation Schedules are attitudinal scales, requiring a response from "strongly agree" to "strongly disagree" on 150 highly debatable statements.

There are only 15 items for each schedule, the schedules being (1) esteem, (2) profit, (3) fame, (4) power, (5) leadership, (6) security, (7) social service, (8) interesting experiences, (9) self-expression, and (10) independence.

Reliabilities for college students range from .71 to .86 with obvious variance on the different schedules. Furthermore, it is not made clear what the precise reliabilities for eight of the schedules are. Validation studies are in process. Standardization is limited, and the author indicates it is still tentative; but he does have norms for males and females. Presently the age range is 15 and up, but there is no reason why the reading level cannot be altered to extend this downwards to at least age 10. The problem is to determine the age when life goals are consistent, if it is possible. This set of schedules may offer insight into the achievement motivation of older adolescent delinquents. An interesting hypothesis that should be examined is one relating the

achievement motivation of delinquents to their rate of recidivism. The manual cites a study in a Veterans' Administration hospital in which the esteem, profit, fame, and power schedules were discriminators of male patients whose rate of return to society was quicker and more stable; that is, they remained out of the hospital longer than those who scored poorly on these same four schedules.

California Psychological Inventory (CPI)

Gough (1959) has developed and re-edited a test with 18 subtests designed to measure psychological adjustment for children 13 and over. Gough (1966) has also reported on a regression equation for predicting delinquency from this inventory.

The 18 subtests of the California Psychological Inventory (CPI) are: (1) dominance, (2) capacity for status, (3) sociability, (4) social presence, (5) self-acceptance, (6) sense of well-being, (7) responsibility, (8) socialization, (9) self-control, (10) tolerance, (11) good impression, (12) communality, (13) achievement via conformance, (14) achievement via independence, (15) intellectual efficiency, (16) psychological mindedness, (17) flexibility, and (18) femininity.

Subtests 7, 12, and 13 are response-validity measures. The CPI consists of 480 items, 12 of which are duplicates; 178 of these were taken from the MMPI, with 35 more MMPI items being revised and then included. The questions call for a true-false response. Gough arrived at the other 15 traits by attempting to determine those characteristics which people talk about the most, in general. Thus, he has generated a "folk conception" using the natural expressive language of people as the means by which traits are defined.

He has developed a series of regression equations, based on the original 18 CPI scales in order to predict leadership, social maturity versus delinquency, and parole outcome, utilizing linear combinations of

existing scales for applied prediction purposes instead of developing new ones.

Factor analysis does not support the 15 working subscales as independent measures of personality. In fact, four factors are all that are generally extracted. The CPI is well normed but reports only moderate test-retest reliabilities--.58 to .75--over a one-year period. In general, it seems to be an excellent research instrument but fails to measure behaviors that are not ascertained by the MMPI or many other tests. The major drawback interfering with its use is the lack of a clear-cut meaning for the scales, which causes a real hardship to their user.

The Hand Test

Thus far in this review we have not discussed the commonly used individual projective tests. Their absence occurs because:

1) they frequently do not report reliabilities or validities, and
2) they fail to serve as instruments that produce valuable empirical data in response to research questions.

One exception, a relatively new test which seems to hold great promise, is the Hand Test, which was developed by Wagner (1959) and which is presently being distributed by the Mark James Company. Aimed chiefly at adults, the Hand Test has been used successfully with children as young as six years old. Besides standard cards, a group-administered form has been designed for experimental use. The test consists of ten cards, nine of which show hands drawn in various ambiguous positions. The tenth card is blank.

The author's purpose and basis for selecting items spring from Wagner's interest in using projective techniques to reveal aggression. He felt that the hand was a natural medium which would reflect important action tendencies related to hostility and aggressiveness.

The various attempts to show the validity (criterion) of the Hand Test are primarily based thus far on its ability to discriminate between subject groups.

Wagner (1962) found that interpersonal, active, maladjustive, and withdrawal responses successfully differentiated 50 male schizophrenics from 50 college students. Wagner (1962) also differentiated between 60 schizophrenics and 40 neurotics using a matched-pairs design with this test. Bricklin, Protrowski, and Wagner (1962) described and compared differences in number and percentage of responses as well as other scoring categories for groups of 32 adult normals, 30 neurotics, 30 schizophrenics, 59 inmates, 10 organics, and 10 epileptics. Some findings which may be briefly reported are as follows: normals had the highest response, inmates the lowest; epileptic patients gave the greatest number and percentage of problematic responses.

A subject's responses to the Hand Test, as explained in the manual, are classified into one or another of fifteen formal "count" scoring categories:

1) Aff (Affection)

   This category includes responses in which the hand expresses affection, a positive emotional attitude, or an affectionately benevolent attitude towards others.

2) Dep (Dependence)

   This category includes responses in which the completion of the action tendency depends on a benevolent or helping attitude on the part of the implied other person(s). Included in this category are any responses in which the hand subjugates itself, in any manner, to another person(s).

3) Com (Communication)

   This category includes responses in which the hand is communicating or attempting to communicate with someone else.

4) Exh (Exhibitionism)

This category includes responses in which the hand displays itself, or is indulging in an activity which is associated with the entertainment world or other exhibitionistic mediums.

5) Dir (Direction)

This category includes responses in which the hands are seen as leading, conducting, thwarting, directing, or otherwise actively influencing or domineering other person(s).

6) Acq (Acquisition)

This category includes responses in which the hands are seen acquiring from other person(s).

7) Agg (Aggression)

This category includes responses in which the hands are seen as dominating, injuring, attacking, or actively seizing another organism or object.

8) Act (Active Impersonal)

This category includes responses in which the hand is seen in an action tendency, the completion of which does not require the presence of another person(s). All impersonal action tendencies in which the hand must change its physical location or exert energy against the force of gravity are scored in this category.

9) Pas (Passive Impersonal)

This category includes responses in which the completion of the action tendency does not require the presence of another person(s) and in which the hand does not change its physical location nor resists the pull of gravity.

10) Ten (Tension)

This category includes responses in which the hand is seen using force without purpose--tension caused by force against an immoveable object.

11) Crip (Crippled)

This category includes responses in which the hand is seen as ill, crippled, deformed, incapacitated, or otherwise in a state of degenerating or imperfect health.

12) Fear (Fear)

This category includes responses in which the hand described is either a victim of someone else's aggressiveness or in which the hand attempts to control someone else, the purpose being to ward off physical injuries. These responses reflect a fear of retaliation or of aggression from others.

13) Des (Description)

This category includes responses in which the hand is merely described. No specific action tendency is stated or implied.

14) Fail (Failure)

This category is used when the subject cannot respond to a card.

15) Biz (Bizarre)

This category is reserved for bizarre responses.

Quay-Peterson Checklist of Problem Behaviors

Two questionnaires which are seemingly reliable in distinguishing between delinquents and nondelinquents are the De Scale (Peterson, Quay, & Anderson, 1959) and the Brief Scale for Juvenile Delinquency (Quay & Peterson, 1958). Responses to the test items were intercorrelated and factor analyzed using the centroid method with an orthogonal rotation of the simple structures. The items were grouped into five factors which the authors (1) assumed had power and (2) demonstrated no tendency to predict a particular type of delinquency. The first factor was psychopathic delinquency, and the second, neurotic delinquency. The third factor had to do with motivation and doing the "right thing"--it was

labeled inadequate delinquency. The remaining two factors were not related to the traits or characteristics of the delinquent, but rather were seemingly responsive to the child's socioeconomic background. An example of the Checklist of Problem Behaviors, as a sample screening device that may be used by teachers or parents, is shown in Table 8.

TABLE 8

CHECKLIST OF PROBLEM BEHAVIORS

Herbert C. Quay, Ph.D. and Donald R. Peterson, Ph.D.

Children's Research Center
University of Illinois
Champaign, Illinois

Copyright 1967
Herbert C. Quay and Donald R., Peterson

Col. No.

Please complete items 1 to 6 carefully.

(1- 8) 1. Name (or identification number) of child _____

(9-10) 2. Age (in years) _____

(11) 3. Sex ___ (Male = 1, Female = 2)

(12) 4. Father's occupation _____

(13) 5. Name of person completing this checklist _____

(14) 6. Relationship to child (circle one)
a. mother c. teacher
b. father d. other _____ (specify)

Please indicate which of the following constitute problems as far as this child is concerned. If an item does not constitute a problem, encircle the zero; if an item constitutes a mild problem, encircle the one; if an item constitutes a severe problem, encircle the two. Please complete every item.

(15)	0	1	2	1. Oddness, bizarre behavior
(16)	0	1	2	2. Restlessness, inability to sit still
(17)	0	1	2	3. Attention seeking, "show-off" behavior

TABLE 8 (continued)

CHECKLIST OF PROBLEM BEHAVIORS

Col. No.				
(18)	0	1	2	4. Stays out late at night
(19)	0	1	2	5. Doesn't know how to have fun; behaves like a little adult
(20)	0	1	2	6. Self-consciousness; easily embarrassed
(21)	0	1	2	7. Fixed expression, lack of emotional reactivity
(22)	0	1	2	8. Disruptiveness; tendency to annoy and bother others
(23)	0	1	2	9. Feelings of inferiority
(24)	0	1	2	10. Steals in company with others
(25)	0	1	2	11. Boisterousness, rowdiness
(26)	0	1	2	12. Crying over minor annoyances and hurts
(27)	0	1	2	13. Preoccupation; "in a world of his own"
(28)	0	1	2	14. Shyness, bashfulness
(29)	0	1	2	15. Social withdrawal, preference for solitary activities
(30)	0	1	2	16. Dislike for school
(31)	0	1	2	17. Jealousy over attention paid other children
(32)	0	1	2	18. Belongs to a gang
(33)	0	1	2	19. Repetitive speech
(34)	0	1	2	20. Short attention span
(35)	0	1	2	21. Lack of self-confidence
(36)	0	1	2	22. Inattentiveness to what others say
(37)	0	1	2	23. Easily flustered and confused
(38)	0	1	2	24. Incoherent speech
(39)	0	1	2	25. Fighting
(40)	0	1	2	26. Loyal to delinquent friends
(41)	0	1	2	27. Temper tantrums

TABLE 8 (continued)

CHECKLIST OF PROBLEM BEHAVIORS

Col. No.				
(42)	0	1	2	28. Reticence, secretiveness
(43)	0	1	2	29. Truancy from school
(44)	0	1	2	30. Hypersensitivity, feelings easily hurt
(45)	0	1	2	31. Laziness in school and in performance of other tasks
(46)	0	1	2	32. Anxiety, chronic general fearfulness
(47)	0	1	2	33. Irresponsibility, undependability
(48)	0	1	2	34. Excessive daydreaming
(49)	0	1	2	35. Masturbation
(50)	0	1	2	36. Has bad companions
(51)	0	1	2	37. Tension, inability to relax
(52)	0	1	2	38. Disobedience, difficulty in disciplinary control
(53)	0	1	2	39. Depression, chronic sadness
(54)	0	1	2	40. Uncooperativeness in group situations
(55)	0	1	2	41. Aloofness, social reserve
(56)	0	1	2	42. Passivity, suggestibility; easily led by others
(57)	0	1	2	43. Clumsiness, awkwardness, poor muscular coordination
(58)	0	1	2	44. Hyperactivity; "always on the go"
(59)	0	1	2	45. Distractibility
(60)	0	1	2	46. Destructiveness in regard to his own and/or other's property
(61)	0	1	2	47. Negativism, tendency to do the opposite of what is requested
(62)	0	1	2	48. Impertinence, sauciness
(63)	0	1	2	49. Sluggishness, lethargy
(64)	0	1	2	50. Drowsiness
(65)	0	1	2	51. Profane language, swearing, cursing

TABLE 8 (continued)

CHECKLIST OF PROBLEM BEHAVIORS

Col. No.				
(66)	0	1	2	52. Nervousness, jitteriness, jumpiness, easily startled
(67)	0	1	2	53. Irritability, hot tempered, easily aroused to anger
(68)	0	1	2	54. Enuresis; bed wetting
(69)	0	1	2	55. Often has physical complaints--for example, headaches, stomachaches

References

Anastasi, A. Psychological testing. (3rd ed.) New York: The MacMillan Co., 1968.

Balogh, J. Juvenile delinquency proneness: A study of prediction factors involved in delinquent phenomena. Journal of Criminal Law, Criminology, and Police Science, 1958, 48, 615-618.

Bechtold, M. L. Validation of the KD scale and checklist as a prediction of delinquent proneness. Journal of Experimental Education, 1964, 32, 413-416.

Bower, E. M. Early identification of emotionally handicapped children in the school. Springfield, Illinois: Charles C. Thomas, 1960.

Bricklin, B., Protrowski, Z., & Wagner, E. The hand test: A new projective test with special reference to the prediction of overt aggressive behavior. Springfield, Illinois: Charles C. Thomas, 1962.

Caine, T. M., Foulds, G. A., & Hope, K. Hostility and direction of hostility questionnaire. London, England: University of London Press, Ltd., 1967.

Cassel, R. Ego ideal and conscience development test. Hollywood, California: Monitor, 1969.

Clements, S. D. The predictive utility of three delinquency proneness measures. Dissertation Abstracts, March 1967, 20, 3827.

Docter, R. F., & Wender, C. I. Delinquent versus nondelinquent performance on the Porteus 2 maze test. Journal of Consulting Psychology, 1954, 18, 71-73.

Glueck, E. Identifying juvenile delinquents and neurotics. Mental Hygiene, 1956 a, 40, 24-43.

Glueck, E. Spotting potential delinquents--Can it be done? Federal Probation, 1956 b, 20, 7-13.

Glueck, E. Toward further improving the identification of delinquency. Journal of Criminal Law, 1963, 54, 178-180.

Glueck, E., & Glueck, S. Unraveling juvenile delinquency. Cambridge, Massachusetts: Harvard University Press, 1950.

Glueck, E., & Glueck, S. Predicting delinquency and crime. Cambridge, Massachusetts: Harvard University Press, 1959.

Glueck, E., & Glueck, S. Reflections on basic research in juvenile delinquency. World Mental Health, 1960, 12, 6-17.

Gough, H. California Psychological Inventory. Palo Alto, California: Consulting Psychologists Press, Inc., 1959.

Gough, H. Graduation from high school as predicted from the CPI. Psychology in the Schools, 1966, 3, 208-216.

Hahn, M. E. The California life goals' evaluation schedules. Los Angeles, California: Western Psychological Services, 1966.

Hathaway, S. R., & McKinley, C. The Minnesota Multiphasic Personality Inventory. New York: Psychological Corporation, 1943.

Hathaway, S. R., & Monachesi, E. D. Analyzing and predicting juvenile delinquency with the MMPI. Minneapolis, Minnesota: University of Minnesota Press, 1951.

Hathaway, S. R., & Monachesi, E. D. The personalities of pre-delinquent boys. Journal of Criminal Law, Criminology, and Police Science, 1957, 48, 149-163.

Hayes, M. Scale for evaluating the school behavior of children, ten to fifteen. New York: Psychological Corporation, 1943.

Kvaraceus, W. C. Kvaraceus Delinquency Proneness Rating Scale and Checklist. New York: World Book Co., 1953.

Kvaraceus, W. C. Forecasting delinquency: A three-year experiment. Exceptional Children, 1961, 27, 429-435.

Lambert, N. M., & Bower, E. M. Bower's two-step process for identifying emotionally handicapped pupils. Princeton, New Jersey: Educational Testing Service, 1961.

Lively, E., Denitz, J., & Reckless, W. Self-concept as a predictor of juvenile delinquency. American Journal of Orthopsychiatry, 1962, 32, 159-168.

Peterson, D. R., Quay, H. C., & Anderson, A. Extending the construct validity of a socialized scale. Journal of Consulting Psychology, 1959, 23, 182.

Quay, H. C., & Peterson, D. R. A brief scale for juvenile delinquency. Journal of Clinical Psychology, 1958, 14, 139-142.

Rankin, R. J., & Wikoff, R. L. The IES arrow dot performance of delinquents and nondelinquents. Perceptual and Motor Skills, 1964, 18, 207-210.

Reckless, W. C., Denitz, S., & Koy, B. The self-component in potential delinquency and potential nondelinquency. American Sociological Review, 1957, 22, 566-570.

Reise, M. W. A comparison between delinquent youth and typical individuals on the ego ideal and conscience development test. Unpublished master's thesis, University of Wisconsin, 1969.

Stodgill, R. M. Behavior cards: A test interview for delinquent children. New York: Psychological Corporation, 1949.

Stott, D. H. A new delinquency prediction instrument using behavioral indications. International Journal of Social Psychiatry, 1960, 6, 195-205.

Thorpe, L. P., Clark, W. W., & Tiegs, E. W. California Test of Personality. Monterey, California: California Test Bureau, 1953.

Toby, J. Early identification and intensive treatment of predelinquents: A negative view. Social Work, 1961, 6, 3-13.

Voss, H. The predictive efficiency of the Gluecks' Social Prediction Table. Journal of Criminal Law, Criminology, and Police Science, 1963, 54, 421-430.

Wagner, E. The hand test. Akron, Ohio: Mark James Co., 1959.

Wagner, E. Application of the hand test indicators of antisocial action tendencies in adults to teenage juvenile delinquency. Paper read at the Educational Psychology Association, April 1962.

Walker, H. M. Construction and validation of a behavior checklist for identification of children with behavior problems. Dissertation Abstracts, 1967, 28, 978-979.

Washburne, J. Washburne Social Adjustment Inventory. New York: World Book, Inc., 1940.

Whelan, R. W. An experiment in predictive delinquency. Journal of Criminal Law, Criminology, and Police Science, 1954, 45, 432-441.

Chapter IV

Behavioral Management of Neglected and Delinquent Youth

Fewer than three offenses in one hundred are detected by the police with less than one in fifty of the resulting arrests terminating in prosecution and conviction (Cohen, Filipczak, Bis, & Cohen, 1966). Even more striking has been the visible and miserable failure of retribution, especially imprisonment, as a means to deter crime and criminal behavior.

> This conclusion is based upon the finding that the longer an offender is held in prison, the greater the likelihood that he will commit further crimes. This was also shown rather clearly by Huetteman and her associates (1970), who found that adolescents placed in psychiatric or correctional settings committed from 150 to 200% more crimes than those adolescents of matched characteristics who were given suspended sentences--despite the fact that the institutional groups spent from one quarter to one third fewer days in the community than did their comparison group (Stuart, 1970, p. 101).

Four mutually incompatible responsibilities exist in the institutional management of delinquents. These are: (1) a custodial function, (2) an educational function, (3) a rehabilitation function, and (4) a benevolent humanistic function. Historically, a second limitation of institutional effectiveness is that there are inadequate resources available to accomplish the goals of the nation's justice system. A third limitation is the lack of technology to compensate for the limited available manpower within institutions.

Most of the programs directed at the corrective intervention and rehabilitation of juvenile delinquents have produced nonsignificant findings. Adams (1968) found that there was no difference between most of the programs where case load and intensive therapy were offered in place of the more standard or traditional procedures.

A major problem with most of the treatment programs is that they are based on (1) the "salvation of all mankind" theories, (2) dubious psychological theory, or (3) the "teach new values" theories, when the delinquents in question cannot reject values alien to their own fast enough. The failure of rehabilitation programs may be attributed to four factors:

1) the permeation of rehabilitation by moralistic and punishment-oriented philosophies,
2) the failure of the mental helath model,
3) the misinterpretation of the meaning of delinquent behaviors, and
4) the logical outcome of labeling or categorizing youth, thereby excluding them from the normal channels of acceptable behavior.

These introductory remarks are not meant to sound the rolls of doom for all habilitative or rehabilitative efforts; they are merely preparatory remarks for the findings on delinquency management reported in this chapter. As will be seen, the management of delinquents requires the creative exploration of alternative techniques to those presently being used.

Interventions Within the Public Schools

A five-year experiment was conducted in Kansas City, Missouri, on the concept of the teacher as a group worker in the classroom. The major hypothesis was that teachers and the classroom environment provide an ideal setting for group work activities and that verbal counseling and academic teaching are far less effective than are group work activities.

This study proposed that, given special help and training, teachers could significantly affect the mental health problems of children in the classroom, particularly the problems of delinquent children. Three kinds

of maladjusted children received special attention: the disruptive child, the withdrawn child, and the culturally deprived child.

The program provided students in the classroom with constructive social experiences, group participation, and effective interpersonal relations as a means to raise school achievement. The aim was to help maladjusted pupils to clarify their behavior problems, to identify possible solutions, and to create classroom opportunities for realistic and socially acceptable methods of dealing with interpersonal difficulties.

It was hypothesized that a youngster--even one who was living in a dismal home setting and who was prone to defensive and rebellious conduct--may conceivably be steered away from a delinquent career and toward useful citizenship if given consistent emotional support, friendship, and timely guidance by a devoted individual outside his own family. In both of the above two studies, the major hypotheses were not confirmed.

Teachers in the Cambridge and Somerville (Massachusetts) public and parochial schools submitted approximately 1,500 names of boys under 12 years of age whom they regarded as difficult. The children were then divided into predelinquents and nondelinquents. A selection and screening process was initiated in order to obtain experimental and control groups, both containing the same proportion of predelinquents and nondelinquents.

The most important variables, in addition to age and prediction rating, were health, intelligence and educational achievement, personality, family factors, and environment. Emphasis was placed on the relationship of these variables, on a profile or "contour" of the personality dimensions, rather than on the presence or absence of a large number of independent factors. It was found that, for the treatment and control groups, differences in the means of 20 selected variables were extremely small.

The major experimental variable in the preventive experiment was the counselor's continued friendship and counsel. The counselors gave

each boy varying individual attention, ranging from advice to moral suasion. Unfortunately, the counseling practice to be used was not explicitly stated and was left to the individual workers, whose styles varied considerably.

No significant differences were reported between the treatment and control groups. The lack of success in such an expensive and long-term experiment to prevent delinquent behavior through prolonged individual personal contact and guidance may be attributed to the fact that each counselor treated his subject in his own way. The individual attention that each boy received from a counselor appeared to be of dubious value.

In reaffirmation of the findings of the Cambridge-Somerville study with boys, a three-year intervention program with potentially deviant girls in a New York City vocational high school confirms the difficulties in attempting to prevent or modify norm-violating behavior. In this experiment of social work interventions, the team of Meyer, Borgatta, and Jones (1965) identified 400 potentially delinquent teenagers. These girls were provided with almost unlimited counseling assistance during their school year. The counseling ranged from personal adjustment to vocational guidance. A control group was established with the outcome that significant differences were not obtained for the groups receiving the intense counseling.

Before the reader concludes that counseling is of little or no value, it should be noted that both of the last two studies report on high school age children. It is my belief that the problems must be dealt with before the high school level. Also, counseling is not preventative; it is ameliorative. Frequently, the home, school, or peer situations that cause the initial difficulties and complicate them with additional pressures may not be receiving any attention from the counseling taking place at school.

Using the three screening techniques discussed in the first chapter, Bower (1955) identified 1,200 pupils in 50 school districts in California

who were emotionally handicapped. Half of these were selected randomly for special consideration which included the use of special classes for the emotionally disturbed at elementary and secondary levels, grouping by learning disability, special placement, adolescent group counseling, special activity groups, mental health consultation for teachers, child study meetings, human relations periods, group counseling for parents, and home economics classes. The remaining 600 pupils were left in the regular classroom and became a control group.

The special provisions appeared to work successfully with some children. An analysis dealt with each special provision and considered the type of children best served, how the children were helped, and the administrative assets and liabilities of each intervention. On the basis of his study, Bower suggests that disturbed pupils can be helped in special classroom settings. As we shall examine later, the value of special education classes for the socially maladjusted depends entirely upon the severity of the child's social-emotional difficulties. There are several things to consider before placing a group of not so emotionally disturbed children together in such an arrangement. Delinquency, like most other forms of human behavior, may be learned. And, since one youth may teach another, grouping delinquent children into classes for instruction raises the question: Is the instruction sought by the teacher or the peer group? The special class issue will be discussed further in this chapter.

Behavioral Control and Behavioral Modification

The use of operant techniques to obtain behavioral controls or shape behavior has filled the recent literature for almost all groups of children or youth who display obstreperous characteristics.

Although the reliability of indices of recidivism for juvenile offenders is highly suspect (Briggs & Wirt, 1965), the effectiveness of traditional psychotherapeutic and counseling procedures has frequently been arbitrary and always complex. There seems to be widespread

agreement that many forms of interventions have not proven very effective in the modification of delinquency. For example, in the United States it has been reported that the recidivism rates for juveniles paroled from reformatories range from 43% to 75% (Arbuckle & Litwack, 1960). Shannon's (1961) survey led him to conclude: "No group or profession has demonstrated the ability to deal effectively with deviant behavior; research shows that treatment results in no greater improvement than that which accrues by simply leaving persons with a behavioral problem alone [p. 35]." The literature (Truax, Wargo, Carkhuff, Kodman, & Moles, 1966) demonstrates the failure of traditional clinical approaches such as group and individual psychotherapy to modifying delinquent behavior. In fact, if Truax and his co-workers are correct, such treatment intervention may be harmful rather than beneficial. At least it can be justifiably suggested that attempts should be made to develop innovative alternative techniques for intervention of delinquent behaviors.

There has been a rapidly expanding literature on the application of operant conditioning in the management and treatment of institutionalized psychotics (Atthowe & Krasner, 1965; Steffy, 1966) and classroom problems (Zimmerman & Zimmerman, 1962; O'Leary & Becker, 1967; Quay, 1966). Although several experimental studies within the operant framework have been conducted with delinquent or criminal populations (for example, Johns & Quay, 1962; Fairweather, 1954), very few operant programs with a therapeutic orientation have been conducted with such populations.

The utilization of behavior modifactions with adolescent delinquents has been demonstrated by Slack and Schwitzgebel (1960). They set up a "laboratory" in an old store in a ghetto area, made contact with delinquents, and paid them to be subjects. The boys were rewarded with refreshments and candy as well as money for attendance, and in time the therapists were able to substitute social rewards for the material reinforcers. The boys were given opportunities to participate in a

variety of activities and to acquire skills that could be utilized to gain rewarding resources. The "no work" ethic began to change and delinquent activities decreased considerably.

The value of operant conditioning techniques in the improvement of academic performance in delinquents (Cohen, et al., 1966) has been demonstrated in the form of privileges and material goods such as cokes, chocolate bars, and the like, which were contingent on the individual's academic achievements. Most projects have been limited to modification of the behavior of delinquents in a classroom situation where teaching machines and other programmed learning aids were utilized almost exclusively. There have been only limited attempts to extend these approaches to the nonacademic life of delinquents. It would be hoped that improvements in the delinquent's classroom behavior would generalize to his behavior in other situations, but this has not as yet been reported.

The effectiveness of operant conditioning procedures has been established in the maintenance of appropriate classroom behavior with conduct problem children (O'Leary & Becker, 1967; Quay, Werry, McQueen, & Sprague, 1966). As any teacher or administrator of an academic program for institutionalized delinquents knows, behavioral controls must be obtained before teaching can begin. One of the major problems in initiating operant procedures with adolescent delinquents is the wide range of behavioral outbreaks they display. Unlike the more severely emotionally disturbed, adolescent delinquents do not manifest highly stereotyped response units. Meichenbaum, Bowers, and Ross (1968) have attempted to construct a classroom operant program for female delinquents. This program was designed to maintain appropriate classroom behavior at a high level rather than to shape new responses. Ten adolescent girls in a special unit in an institution were placed together for the purpose of classroom management and academic learning. Generally, the subjects were described as manipulative, rebellious, uncontrollable, hostile, aggressive; the term "adolescent psychopath"

was used to describe them diagnostically. No attempt was made to have the teachers modify their teaching methods or their methods in controlling the girls. Instead, a four-phase study was initiated. Using this program of study the teachers were able to demonstrate the effectiveness of operant procedures in modifying inappropriate classroom behavior of institutionalized female delinquents. Institutionalized girls prior to treatment behaved appropriately 45% of the time. Following treatment, the institutionalized girls behaved appropriately 93% of the time. The possibility of extending these treatment approaches beyond the classroom has been clearly indicated.

The subjects in the project by Meichenbaum, Bowers, and Ross (1968) were 13- to 17-year-old delinquent girls admitted to the 50-bed treatment unit at the Ontario Reception and Diagnostic Center following unsuccessful treatment or training at other training schools. The girls had received traditional institutional treatment in previous years but had failed to respond successfully to the therapeutic intervention. They were described as psychopathic, assaultive, aggressive, and belligerent. They had evidenced behavior problems such as habitual truancy, alcohol and drug use, running away, heterosexual and homosexual promiscuity including prostitution, assault, attempted homicide, and attempted suicide. While in the institutions, the girls presented insurmountable management problems, such as frequent destruction of property, manipulation of staff, theft, fighting, homosexuality, attempted suicide, and self-mutilation.

The four phases of this study are described below.

Phase I Phase I was the baseline period. Observations were secured of the girls' classroom behavior. These observations lasted for a two-week operant period. The girls repeatedly attempted to interact with the observers; but because the girls persistently ignored these interactions, they completely diminished.

Phase II The treatment procedure was initiated in Phase II by instructing the girls on how they could earn money (reinforcement) if they behaved appropriately in the afternoon classroom. Appropriate and inappropriate classroom behavior were defined. Every ten minutes in the afternoon classes, the girls received a slip of paper indicating the percentage of appropriate behavior. Throughout the treatment program each girl met daily for banking hours; during this period each girl was told the amount of money she had earned and the frequency of inappropriate classroom behavior. The girls received no feedback concerning morning classroom behavior. In this phase a girl could not lose money already earned. A zero percentage of appropriate behavior resulted in no earnings. Money was placed in the girls' accounts at the end of each week. The girls had access to the money on weekends.

Phase III The afternoon class was treated in exactly the same manner in Phase III. In addition, appropriate classroom behavior in the previously untreated morning class was also reinforced. However, because of the girls' requests for immediate feedback in terms of money earned, a change in the feedback was made.

Phase IV Phase IV introduced a further modification designed to increase the maintenance of appropriate classroom behavior. Reinforcement in both the morning and afternoon classes during Phase IV was dispensed in the same manner as in the morning class of Phase III--using a schedule of reinforcement with feedback consisting of money values. However, during Phase IV the girls could lose money they had earned the previous day if they displayed inappropriate behaviors.

The treatment program included the four phases mentioned above: Phase I - operant period, Phase II - feedback on afternoon classes, Phase III - feedback on afternoon and morning classes, and Phase IV - possible loss of previously earned reinforcement. Following three weeks of intervention, the girls' classroom behaviors were comparable to those

of the noninstitutionalized control group and were described as completely appropriate for academic teaching.

One issue facing the use of operant procedures is how to obtain academic learning proficiency following the withdrawal of the extrinsic reinforcers. Some educators refuse to believe that token systems can be used successfully because of the inability of the subjects to transfer from the extrinsic motivation system of rewards to a more intrinsic one. Various motivational approaches have been used, ranging from the intrinsically satisfying--where the main effort was to capture the feeling of success--to the use of various token economics.

Further evidence of the effectiveness of operant procedures in modifying delinquent behavior is offered by Tyler and Brown (1967) and Burchard (1966). These investigators modified antisocial responses and academic performance of institutionalized adolescent retarded delinquent males with operant techniques. A persistent finding of such research with institutionalized adolescent delinquents is the relative initial ineffectiveness of verbal reinforcement (praise, reprimands, etc.) in modifying antisocial behavior. The need for more potent reinforcers is clearly indicated.

Tyler and Brown (1968) described a program designed to improve the academic performance of delinquent boys by setting up a token economy. The subjects were 15 court committed boys, 13 to 15 years of age. At 6 p.m. each evening, Monday through Friday, the television set in the cottage was turned to the Huntley-Brinkley Report. The subjects were permitted, but not required, to watch the program. The following morning in school, a ten-item true-false test was administered, based upon the TV program from the night before. After returning to the cottage that afternoon, those subjects on contingent reinforcement were paid in tokens according to their scores on the test. Noncontingent subjects were paid a straight salary. After a Phase I period of 17 days, Phase II was initiated with a similar procedure to Phase I, except that

the groups in Phase II receiving the contingent and noncontingent reinforcements were switched. The hypothesis that test scores would be higher under contingent rather than noncontingent conditions was tenable for both groups. In fact, the significance between contingent and noncontingent reinforcement for the two groups among the subjects was at the .05 level, and the within group switch was significant at the .005 level.

Graubard (1969) reported findings similar to those yielded in the Tyler and Brown (1968) study. He based his views of delinquents on the fact that they appear to have a value system and a way of life unacceptable to school officials (Cloward & Ohlin, 1960). Parsons (1954) has maintained that the delinquent subculture finds school to be unmasculine and alien to its reward systems. This, in turn, raises the question of the value of teacher praise as a positive reinforcer for delinquents. Zimmerman and Zimmerman (1962) found that teacher praise in special classes decreases academic performance. It appears that the ability of teachers to win delinquents over to an academic value system has failed. Graubard (1969) found evidence that with disturbed delinquents, peers were much more efficacious than teachers or other authority figures in producing rewards that increase learning.

The primary purpose of Graubard's (1969) study was to ascertain whether the delinquent peer culture could explicitly be enlisted in the acquisition of academic skills and the diminuation of antischool behavior, and to determine if children could learn more effectively and efficiently by utilizing the peer group as the reinforcing agent rather than the teacher.

Graubard's subjects were eight boys in residential treatment for antisocial behaviors through court order. They ranged in age from 10 to 21. Reading levels ranged from third to sixth grade, and IQ scores ranged from 74 to 112.

The class was taught under three different conditions. Under the first condition, a group consensus determined reinforcers. The subjects

selected kites, goldfish, shirts, baseball bats, marbles, and money. Points were assigned to each of these given items, and the acquisition of these reinforcers was contingent upon each subject's achieving a minimum number of points. These could be earned for following school rules and for achieving specified outputs of academic work explicitly defined for each subject area. Rules dealing with attendance, destruction of property, and use of physical force in the classroom were given to the subjects and not open to discussion.

The group consensus period was followed by the noncontingent reward condition. During this condition the same academic routines and work schedules were followed as in the first period, but points were given at the beginning of the day and thus were not contingent on the subjects' behaviors. After the noncontingent teaching condition, the first group consensus condition was reinstated.

During the beginning of the project, behavior points were worth twice as much as academic points; but as the sessions progressed, these procedures were reversed. During the last condition--group and individual contingencies--each subject still had to achieve minimum behavior and academic points to win group prizes, but the prizes changed.

The dependent variables were appropriateness of classroom behaviors and reading levels. Reading gains were measured by progression from lower level SRA material to SRA material of a higher grade level. Each subject was able to read and comprehend material at least two colors above his own entry point or baseline during the course of the 20-session project, each color code representing roughly a corresponding grade level. Group reinforcers for appropriate classroom behavior plus individual reinforcers for academic achievement proved to be the best intervention. The author concludes that a ". . . group can be a powerful instrument in teaching disturbed delinquents [p. 267]."

Kuypers, Evans, and Allen (1968) reported on a four-step system using tokens to obtain desirable behaviors with young emotionally

disturbed children in an institutional setting. They utilized a step system whereby the children were required to progress through each successive step which required more responsible behavior than the preceding one. Each step made available more potent and more numerous reinforcers to the children. The four steps or levels are:

Level I - Subsistence Level

Level II - On-Unit Privilege Level

Level III - Off-Unit Privilege Level

Level IV - Allowance Level

A discussion of the four levels is presented.

Level I - Subsistence Level. In the first step in the system the child receives an explanation of the nature of the token system. At this level the child must engage in a specified number of appropriate behaviors if he is to live at a level of minimum comfort on the unit.

Minimal Appropriate Behaviors Required

The basic types of behaviors for which tokens are administered are listed below, and the number of tokens earned by these behaviors is included in parentheses.

1) Unit Behaviors

a) The child must make his bed before going to breakfast. (1 token)

b) The child must straighten up his room. (1 token)

c) The child must be neatly dressed; that is, his clothes should be clean, his shirt should be tucked in (if appropriate)--basically, his clothes should not be in too great a disarray. (1 token)

d) The child must wash his hands before going to lunch. (1 token)

e) The child must brush his teeth after lunch. (1 token)

f) The child must neatly arrange his drawers and closets before leaving for school. (1 token)

g) The child must wash his hands before dinner. (1 token)

h) The child must brush his teeth after dinner. (1 token)

i) The child must put out his laundry before snack time. (1 token)

j) The child must be in bed on time. (1 token)

2) School Behaviors

A classroom engineering theme was designed in which a child could earn a total of 12 tokens each day for nondisruptive social behavior and/or academic behavior at school. A token was administered at the end of each 10-minute period to each child, contingent upon his behavior. What was required of the child was determined by the level of the school token system in which he was participating. For example, if a child was on Level I, he received tokens for nondisruptive behavior and for level of performance; if a child was on Level III, he received tokens for level of performance.

After a child had earned a minimum of 18 tokens for 12 out of 14 consecutive days, he was promoted to the next level.

Level II - On-Unit Privilege Level. The economy at this level was based upon a maximum earning power of 34 tokens.

Minimal Appropriate Behaviors Required

The minimal behaviors required under Level I were also required and reinforced at Level II. The child received the same number of tokens for these minimal behaviors as he received on Level I. In addition, he was able to earn 12 tokens per day for emitting other appropriate social behaviors. The first 7 days a child was on Level II, efforts were made to give him all 12 appropriate social behavior (ASB) tokens. Thus, Level II was a "shaping phase." The general procedure involved praising the child for a particular behavior while at the same time giving him one token. Only one token can be given for each particular appropriate behavior with the emphasis on shaping successive approximations to desired terminal responses. Upon completion of this

initial period of seven days, ASB tokens were dispensed on a variable ratio schedule determined by the frequency of appropriate responses. It was expected that the ratio would increase as a function of the child's progress on Level II. The initial shaping period of one week (approximating continuous reinforcement) would not be applicable after the child had gone through it once; that is, the second time around the child would not be directly on the variable ratio schedule.

Level III - Off-Unit Privilege Level. The child on this level was permitted to engage in activities which took place off the unit. These activities were available only to children on Levels III and IV. However, in order to participate in the off-unit privileges, the child must have been functioning on Level III in the school token system. The other basic distinction between this and preceding levels is that the child was expected to help in the physical maintenance of the unit and/or was permitted to engage in other token-earning activities--either on or off the unit. The economy at this level was based upon a maximum earning power of 41 tokens, the 7-token increase over Level II being due to the addition of a job to the child's duties.

Minimal Appropriate Behaviors Required

The minimal behaviors required under Levels I and II were also required on Level III. However, the children were no longer reinforced with tokens for individual behaviors. The child could earn 17 tokens by satisfactory job performance, the jobs all being completed in order to receive payment. In other words, failure to complete one of the minimal or job behaviors resulted in a loss of all 17 tokens.

Level IV - Allowance Level. Once this level had been reached, discharge considerations and proceedings were initiated. Unlike the other three levels, the child was not given tokens for individual responses but instead was given a supply of tokens (an allowance) following specified periods. He had free access to all unit facilities; for example, meals, TV, game room, phone calls, etc.

The intent was to increase the delay between response and tangible reward (tokens). This goal was initiated on Level III by lumping together the minimal appropriate behaviors with the job. It was assumed that the child would have demonstrated enough responsibility, by advancement to this level, to make the withdrawal of immediate token contingencies and greater reliance on social reinforcers feasible to that point. The second purpose of this level was to wean the child from the artificial contingencies of the token system in order to help him function in a situation which more nearly approximated that found in the community.

Minimal Appropriate Behaviors Required

For the first six weeks that a child was on Level IV, the behavioral requirements for earning tokens were the sum of those at the lower levels. He was expected to make his bed, to attend and behave appropriately in school, to be cooperative, to satisfactorily complete his job each day, etc. In other words, he was expected to behave in a generally appropriate manner. It was important for the staff members to continue their social reinforcement of these behaviors since the child was no longer under the immediate and direct control of the token system. This was a critical point for the child from a therapeutic standpoint for it represented the transfer from tangible reinforcers to social (verbal and gestural) ones. Tokens were continued on a noncontingent basis for the period a child remained on Level IV. The details of the contingent and noncontingent allowance procedures follow.

Contingent Allowance

Five tokens could be earned each day for the satisfactory completion of the assigned job, plus minimal appropriate behaviors. Five tokens each day could be earned for school work, and another five tokens were automatically given to the child. A percent conversion formula was used to determine how many of the ten tokens for job and school were earned each day; that is, percent actually earned of total

possible school tokens of percent minimal appropriate behaviors in which the child engaged.

The schedule involved three 2-day delays, two 4-day delays, and four 7-day delays. Following this period, all allowance tokens were given with 7-day delays.

Noncontingent Allowance

If a child successfully completed six weeks on Level IV, he was then given his allowance every seven days, noncontingent upon his behavior. This noncontingent allowance remained in effect as long as the child remained on Level IV. He was expected to continue his job and school work even though tokens were noncontingent. Direct measures of his performance were taken and used as a basis for assessing his total development.

Institutional Participation in a Token System

At a recent meeting of the Association for the Advancement of Behavioral Therapies, Wilkinson, Saunders, and Reppucci (1951) described the involvement of an entire institution in a token system. The setting for research was a state training school for 12- to 16-year-old male delinquents. The total institutional staff was approximately 210, and the boys numbered from 150 to 180, depending on the time of year.

In planning the new rehabilitation program, it was clear that the whole school would have to be involved, which meant shaping eight cottages, the academic-vocational social service and clinical departments, and the recreation program into a token system.

Staff and boys at the institution were polled for a list of constructive behaviors performed by boys from commitment to release. Cottage duties, personal hygiene, school activities, social conduct, institutional and community jobs were all included. The final list covered a full range of ideal behaviors--trivial and significant, simple and complex. Staff and boys contributed a parallel catalogue of rewards that were either

available or plausible. Both lists were slightly expanded, organized, and printed for distribution as a rating inventory.

From this inventory, 143 behaviors and 68 rewards were rated. Items were standardized for each rater along with all his ratings to allow for individual distributions. A mean rating for each item was then obtained from all the raters' standard scores. Included within the rewards to be rated was a set of monetary values from $0.05 to $5.00. This provided an index for adding later merchandise which had not been rated on the inventory. Some boys filled in exorbitant figures for several of the more difficult jobs and desirable rewards. On the lesser job ratings, however, there was more agreement between staff and boys. As expected, the rewards and behaviors fitted reasonably on the monetary scale. The initial sampling did reflect the actual range and distribution of behaviors and rewards at the school. Labor--whether paid for in money, goods, or privileges--was rated cheaply and certain behaviors--such as staying in seat for one class, stopping a fight, a telephone call, and a dance--revealed, by their relatively high evaluation, the importance of restraint and freedom to this group.

For the token economy, the behavior and reward scores were divided into three groups at 0.0 and +1.0. Since the distributions were positively skewed, Level I (the lowest group) had the largest number of items, Level II had the next largest, and Level III had the smallest. The basis for the boundaries was an almost exact correspondence between Level I and the cottage, Level II and the total institution, and Level III and the external community. This became a clear paradigm for subsequent ratings; new jobs or rewards could be located within a level and then rated against the others within that level, with no transformations needed.

The transformations used for inventory items were linear, bringing each level within a 5- to 25-point range. That range allowed for the scale to expand without becoming unwieldy. Moreover, it would

prevent higher level boys from cornering the market on Level I rewards with accumulated capital.

The boys' movements through the levels resulted in a changing of reinforcement schedules. Level I involved continuous reinforcement of specific work behaviors within the cottage. At the same time, boys received conduct points each hour for acceptable social behavior. This provided a background for relief from positive reinforcement during disruptive episodes. (The list of these time-out behaviors plus all jobs, rewards, and economy rules was posted in the two cottages.) Level II added a new set of behaviors and rewards to Level I, but the boys were reinforced only for these new behaviors. They still had to do their Level I jobs, however, in order to continue to receive conduct points. This meant that boys in Level II enjoyed all the privileges of Level I and II rewards and jobs, but they also bore increased obligations. In addition, they received conduct points every two hours instead of every hour. The same process occurred for Level III. Given the above rating procedure, individual programs, including therapy or special classes, could be constructed for Level II and III boys. Their earnings had to be held to the average weekly range for all levels, but within those limits, particular tasks and available rewards could be assigned.

Behavioral Conditioning Programs

A short-term operant conditioning program was described by Schwitzgebel (1970). Two matched groups straight off the street were differentially treated during the course of 20 tape-recorded interviews on 4 classes of operants: (1) hostile statements, (2) positive statements, (3) prompt arrival at work, and (4) general employability. Results in both the laboratory setting and a natural setting showed a significant increase in the frequency of behaviors followed by positive consequences. Attempted punishment of hostile statements, however, resulted in no significant decrease. The frequency of positive statements and of

attendance of behavior was altered with an average of only six reinforcement attempts. One of the issues rated by this present study concerned the adequacy of a reinforcement.

It is possible that control over these two operants could have been accomplished by the informative or instructional properties rather than the rewarding or incentive properties of the prearranged consequences. Unfortunately, these alternative hypotheses were not explicitly investigated. It seems somewhat unlikely, however, that the instructional aspects alone could account for the observed changes. The very nature of the subject population suggests that these were individuals who would not respond readily to adults' instructions to be prompt for appointments or to talk kindly to other people. Both experimental groups were informed as to the next scheduled appointment and were generally aware of the experimenter's desire for promptness, yet performance was significantly improved only in the group receiving the rewarding consequences. Furthermore, the "burst" of appropriate behavior which often occurs when meaningful instruction or information is initially given to well-motivated subjects did not occur in this study at the onset of the treatment phase.

The procedures of the present experiment did not permit us to specify with any certainty or preciseness what the effective variables of change were. However, several other studies suggest the kind of functional relationships which might be profitably investigated in the future. Allyon and Azrin (1968), investigating the differential effects of instruction and reinforcement, for example, have found that adult psychotic patients would show a sharp rise in appropriate behavior--that is, use of silverware at meals--when first instructed. Performance would then gradually deteriorate. Consequences without any instruction yielded steady but marginal improvement. Instruction and contingent consequences produced a high steady rate. Other work (for example, Goldiamond, 1962) has demonstrated the importance of contingency

relationships between operant and consequence conditioning. Spielberger, Bernstein, and Ratliff (1966) have claimed that some awareness of the correct response is necessary for verbal conditioning in adults, but that once this awareness occurs, most change is attributable to motivational factors.

The failure to obtain a more profound reduction in hostile statements or clearer transfer effects is believed largely to be a result of procedural inadequacies. Many of the tests or observations in the restaurant proved to be unreliable, and experimenters were somewhat hesitant to apply aversive sanctions to hostile verbal behavior during the interviews for fear that subjects might become angry or not return.

The results of the present study would seem to indicate the therapeutic feasibility of an environmentalistic interpretation of behavior disorders. Freud (1958) has written that, among other things, adolescents are very difficult to get into treatment programs because they do not cooperate, they miss appointments, they are not punctual, they cannot or will not introspect, and their rapidly changing emotional patterns leave little energy available to invest in the analyst. These behaviors may be typical, but, in this writer's opinion, they can be modified without extreme difficulty. Informal observation after the present study indicated that in a few cases "trying to attend work" had not been completely extinguished even two months after termination of employment.

A study by Buehler, Patterson, and Furniss (1966) suggests the assumption that the interpersonal communication transactions within a peer group function as reinforcers. When put in terms of a reinforcement paradigm, this means that the peer group influences the future probabilities of the recurrence of behavior. If the response is rewarding, the act will tend to be repeated. If the response is aversive, the act will tend not to recur. The peer group provides massive schedules of positive reinforcement for deviant behavior and negative reinforcement or

punishment for socially conforming behavior. The authors concluded that settings which provide prolonged interpersonal transactions among delinquent adolescents might be expected to provide an excellent opportunity for maintaining existing deviant behavior and, for the "novice," an opportunity to acquire new sets of deviant behavior. They also hypothesized that within the institutional setting, the majority of social reinforcers are provided by the peer group rather than by the staff. The institutional setting thus can be viewed as a "teaching machine" programmed for the maintenance and acquisition of deviant behavior rather than for retraining the child to more socially adaptive behavior.

Social learning research has tended to classify communication behavior as verbal or nonverbal, without identifying the specific communication behavior which is utilized by members of particular subgroups of a population. Since sociocultural studies have long indicated that there are wide variations among people in the use of interpersonal communication behavior, it follows that no standard reinforcement contingencies exist which can cross all age, sex, and cultural subgroups. As a means of obtaining more precise measures of peer group social reinforcement behavior in an institutional setting, the interpersonal communication behavior analysis method and the social reinforcement method utilized previously by Buehler, et al., (1966) were combined.

The interpersonal communication analysis method is a method for observing and measuring interpersonal communication behavior in terms of four postulated levels of communication (Richmond & Buehler, 1962; Buehler & Richmond, 1963 a, 1963 b). This method, developed within a transactional rather than a self-action or interactional frame of reference (as defined by Dewey and Bentley, 1949), is based upon the postulate that all interpersonal behavior is communication and that this behavior occurs on four primary levels. These levels are: (1) biochemical, (2) motor movement, (3) speech, and (4) technology.

Each of the four levels or categories has subcategories which are defined operationally in terms of observable movement on the part of a person during interpersonal transactional episodes. The unit of measure is a time interval of 2.5 seconds. All behavior which occurs in any category is scored once in each interval. Meaning, intent, effects, etc., are rigorously excluded from the scoring system as these are seen as an observer's subjective interpretations of the observed behavior and should be derived, if necessary, from analyses of the sequences of ongoing behavior rather than imputed to the behavior by the observer.

It was predicted that the combination of these two methods and their implicit coding systems would result in a more powerful instrument for measuring the specific reinforcement processes within a peer group. The Buehler, Patterson, and Furniss (1966) study was done in a state institution for girls who had been committed by juvenile courts for a variety of socially maladaptive behavior.

Analyses of the data yielded the following results:

1) In peer reinforcement of delinquent behavior, the nonverbal levels of communications were used in 82% of the reinforcing responses, while verbal reinforcement was used in only 18% of the responses on all sample cottages.
2) In peer reinforcement of socially conforming behavior, 16% of the reinforcers occurred on the level of speech and 84% occurred on the nonverbal levels.
3) The frequency of delinquent responses did not differ with respect to "open" versus "closed" cottages. Consequently, "open" as compared to "closed" cottage status did not signify any significant difference in the frequency of delinquent behavior within the peer group.
4) Delinquent behavior was rewarded by the peer group on the open cottages as frequently as it was rewarded on the closed cottages.

5) On all sample cottages (four of the institution's eight), the reinforcement of delinquent responses by peers occurred significantly more often ($p < .001$) than the punishment of delinquent responses.

6) On all sample cottages, the peer group punished socially conforming behavior more frequently ($p < .01$) than they rewarded such behavior.

A matched study design (Ostrom, Steele, Rosenblood, & Mirels, 1971) was used to ascertain the effectiveness of an experimental program for the reduction of delinquent behaviors in adolescent boys. The experimental and control groups were comprised of 19 subjects each; all of these boys were on probation and were invited to participate in a series of small group sessions. The experimental subjects were encouraged to become participants in free and open discussions of their previous delinquent activities, future behavioral intentions, personal values, and life goals. A significant reduction in the frequency of subsequent delinquent behaviors was found for the experimental subjects as contrasted to the control group.

Nine months after the termination of the sessions, the experimental subjects demonstrated significantly more internal responses on a modified version of the Rotter IE Scale than did the control subjects. The difference between this study and those reported in the last section is that it did not attempt to treat the "whole person" as most delinquency abatement projects have emphasized. Instead, the emphasis was on treating specific classes of behaviors, and the individual value system and personality defects were ignored. "Although a paradigm was sought in which values, aspirations, and ideals could be discussed, this was always done in reference to specific behaviors. No attempt was made to analyze or improve the personalities of the participants [p. 120]."

The two major shaping techniques used in this study were the use of minimal incentives--in this case money--to achieve a reasonable

project and frequent attendance. The use of minimal incentives has been shown to maximize change in human behavior. Role playing was extensively employed as an activity, as it has been shown to have a long-term effect on behavioral change. Group leaders created plots, and the individuals acted through various roles of parents, arresting officers, victims, law breakers, judges, jailers, school teachers, gang leaders, innocent bystanders, etc. Research studies to date have shown that role playing is also effective in creating an atmosphere to inoculate the participants against future temptations.

Lawson, Greene, Richardson, McClure, and Pandina (1969) described a token economy program in a correctional institution. They found that "troublemakers" (n = 41) in a correctional institution will engage in reinforcing activities that give them access to a variety of commodities. A token economy program represents an effective treatment method in a correctional hospital to gain behavior control.

In order to determine daily ward activities for the token economy program, a two-month behavioral time sampling of each patient's behavior was obtained by Lawson, et al. (1969). The time samples were collected by the unit officers. Generally, over 70% of the sampled patients spent most of their time asleep, lying or sitting awake, pacing, or continuously watching television. Spontaneous behavior--such as card games and going to OT, gym, or school--was negligible and limited to about ten individuals.

Briefly, the activity schedule of the ward 5 token economy program was as follows.

Time	Activity	No. of Tokens
a.m.		
7:00- 7:30	Patients arise, wash, dress, take medication.	3
7:30- 8:00	Breakfast (6-man chow crew). All meals on ward.	8
8:00- 9:00	Work period: dormitory, clean up back halls day hall, washroom; bedmaking.	2-10
9:00-11:00	Individual patient activities: OT, gym, music, ward crafts, ward film, ward meeting.	14
11:00-12:00	Commissary; volunteer jobs.	2-10
p.m.		
12:00- 1:00	Lunch	3
1:00- 3:00	Similar activities as 9:00-11:00 a.m.	14
3:00- 5:00	Reading time; volunteer jobs.	2-10
5:00- 6:00	Dinner	to be determined
6:00- 7:00	Commissary	to be determined
7:00-10:00	Free time: reading time; access to radio, phonograph, game rooms, and yard.	3 per half hour

Each of the activities was defined in as great detail as possible. The activity schedule was posted throughout the ward and each patient was given his personal copy. Volunteer job assignments were managed with a sign-up procedure.

To determine the types of reinforcements for the program, an individual preference survey was administered to all patients. The survey indicated that cigarettes, fruits (oranges, bananas, apples), soda, and candy were preferred in that order, with few patients showing preference for access to reading and game rooms. Consequently, the commissary was stocked with commodities such as soap (25 T), pretzels (10 T), potato chips (10 T), shoe polish (25 T), cigars (10 T), pipe tobacco (25 T), milk (15 T), gum (5 T), and life savers (3 T). In the evening subjects could earn access to radio, phonograph, reading, game,

and library rooms at 3 tokens per half hour. Patients could bank a maximum of 20 tokens per day which could be used to purchase a variety of small items.

The subjects were told that the program was completely voluntary and that they could leave the program whenever they wished to do so. None of the subjects left voluntarily, but three patients were transferred for repeatedly stealing tokens.

Ross (1968) investigated the efficacy of operant conditioning techniques (reinforcement therapy) for the treatment of institutionalized female delinquents. The study was based on several considerations:

1) Traditional methods of therapeutic intervention with adolescent offenders appeared to have questionable success.
2) Operant conditioning and other "behavior therapy" approaches were reported to have had considerable success with other patient populations (for example, schizophrenic adults, autistic children, and retardates) but had seldom been extended to the treatment of the offender.
3) Pilot studies, which were conducted at Galt using operant techniques with a small number of offenders with severe behavior problems, suggested that these techniques offered considerable promise for success with such patients.

The results of these studies suggested that ward management can be quickly achieved; the behavior problems presented by patients dramatically reduced in frequency and severity; and the patient's personal appearance, social skills, and self-control considerably ameliorated in a reinforcement therapy program. However, the pilot studies also revealed many problems indigenous to female offenders which suggested the necessity of designing an operant program specific for given populations.

Extending the Institution

The programs described thus far in this chapter were conducted in schools or institutions and, in some cases, in schools on institutional grounds. In this section, the programs discussed extend those on the institutional grounds into the community and particularly into the home. There is little question that even if we are effective in modifying delinquent behaviors in the institutions, the environment that will receive these delinquents must also be changed.

It is refreshing even to find that current thinking includes consideration of prevention. It would appear that with behaviors as predictable as delinquency, preventative efforts could be built into systematic programs. Kvaraceus (1964), writing on the problem of prevention, initiates his discussion by noting the numerous funding sources from which monies are available to institute such programs. He identifies three major aspects of prevention: (1) early identification, (2) systematic community efforts, and (3) exploration of the conditions prerequisite to prevention. These are expanded into ten crucial conditions or prerequisites for a total community treatment course of action.

1) The mood orientation must be positive and rehabilitative.

Apart from the conscious and subconscious exploitation of types of delinquent acts, one can sense in the climate of every large city five mood orientations on the part of the citizens who express concern for the prevention of serious norm violations by youth. These include Messianic sentimental pose, the punitive-retaliatory stance (dominant mood), the positive-humanistic mood, the diagnostic-therapeutic attitude, and the cultural-reconstructionist point of view. The delinquency prevention and control programs that "sold and sponsored" will vary considerably according to the mood that dominates the power structure of the community. In many cities, the prevailing mood swings back and forth unsteadily from retaliation to rehabilitation and accounts for much

friction and conflict concerning the most promising approach to meeting the problems of youth.

2) Public understanding with minimal emotional involvement must be achieved.

The average citizen, beset with his own problems of daily life, seldom reacts to episodes and reports of delinquency with any degree of objectivity or understanding. Often he becomes emotionally involved. An informed and objective citizenry is a prerequisite to effective social planning. It is the rare city that can provide this prerequisite.

Most middle-class citizens live staid and settled lives devoid of excitement or adventure other than that which they purchase by way of a secondhand experience in the sports arena, in a book, or on the screen. Reports and accounts of beach riots, juvenile sex episodes, vandalism, mugging, young unwed mothers, and teenage drinking can be provoking, even titillating.

Nor are adults beyond direct exploitation of the delinquency phenomenon. Various community groups and organizations--even political parties--have been known to vie for the sponsorship of conferences and programs and for funds aimed to prevent and control juvenile delinquency at federal, state, and local levels.

The pornographic outlets, the crime-comic publishing houses, and the call-girl rackets are not controlled by teenage monsters; these are run by adults, many of whom would sell any youngster "down the river for a buck." Coming to grips with delinquency prevention in the big cities will mean facing adults who find, in the social inadaptation of youth, a profitable--even pleasurable--business. It will also mean broadening and intensifying efforts at informing the public of the meaning and implications of norm violators among youth.

3) The community needs facts.

Whether the action programs that evolve from local, regional, or national study and planning merely reinforce the time-worn palliatives and panaceas (the rod, the law, the curfew, the playground) or actually culminate in adaptations relevant to the delinquency antecedents will depend on how accurately and how fully the community answers the question: "What are the real facts in our community--just the facts?" The community must consider this question at three levels: (1) the level of theory, (2) the community level, and (3) the case level. Most communities are "action minded." There is always strong pressure to "do something about the problem." Speedy action, taken without due consideration of all the facts at these three levels, leads to wasteful expenditure of time, money, and energy.

4) The norm violators need to be differentiated.

The term "juvenile delinquent" represents a nontechnical and pejorative label; it does not stand for a meaningful, diagnostic category but refers to a potpourri of many kinds of youthful offenders. Few communities bother to differentiate the delinquent. In fact, we do not yet know how many different "types" of offenders are to be found in the delinquency spectrum. One will need to be mindful of the largest group, which represents a strong misture of pathological and cultural antecedents for whom a dual treatment program must be envisioned.

5) Early identification of future delinquents needs to be followed by systematic referral.

It is true that delinquency is not a 24-hour malady. It does not develop overnight; it develops over a long period of time. The future delinquent may often spark off many hints of his coming explosion. Why cannot the cities, working through such agencies as the schools, look for early indications of future delinquents and systematically screen off for study and treatment all those youngsters who are prone, susceptible, vulnerable, or exposed to delinquent patterns of adjustment?

6) Youth participation in delinquency prevention and control should be maximized.

Most citizens live in the hope and expectation that eventually some outside authority, institution, or agency (police, child guidance clinic, school, recreation director, court, youth commission, or state youth authority) will come to the rescue and solve--with something of magic, if not money--the problem of juvenile delinquency. In some cities, the various agencies have teamed together in a spirit of cooperation to prevent and control the serious and persisting norm violations of youth, but they generally omit or exclude the most important player--the youth himself. In a sense, only delinquents can solve the delinquency problem; but they are seldom consulted in the study, planning, and implementation of programs for delinquency prevention.

7) The selection and screening of youth workers need to be refined.

If the norm violators are to be helped, they must be assured of assistance from the highest quality of professional personnel who, themselves, have received a clean bill of health. It is true that the sick frequently attract the sick. The socially inadapted always include difficult, disturbed, or disturbing youngsters. Adults who are hired to assist in the rehabilitation process should give evidence of emotional maturity and of valid interest in and of firm commitment to young people--even when they persist in their delinquencies. The case worker, teacher, recreational leader, probation officer, or juvenile court judge who is unable to cope with his own social and emotional problems represents a bad risk for dealing with the norm violator. Indeed, it is the rare individual who can look with professional objectivity upon any and every youngster who has violated community norms and who constantly thumbs his nose at official authorities. Even the best-equipped professional can become personally involved with the delinquent and his

family, either through over-identification or through retaliation and rejection--especially when readjustments are not forthcoming in spite of the extended help that has been provided painstakingly by the worker.

8) Agency aims should be clearly enunciated; agency activities should be continuously evaluated.

Many community agencies and institutions, public and private, in their sincere concern for troubled youth and in their zeal to help, have tended to turn aside from their special aims and unique functions. Out of this confusion of roles has emerged a never-never adult and professional world--in which parents are acting like their youngsters' peers; police, in juvenile details, are acting like probation officers or recreation leaders; probation officers, in conducting "informal hearings," are acting out the role of judges; and juvenile court judges are acting like psychiatrists in the adjudication process. Other community workers, as in the public schools, are taking on omnibus functions. They are trying to be everything to every pupil. Unless agencies and institutions stop to define or redefine their unique goals and functions and begin to gather housekeeping statistics with which to evaluate their efforts to help the young norm violators, the result can only mean a community suffering from institutional schizophrenia. The incipient stages are already visible in many metropolitan centers.

9) Effective coordination of local resources must be achieved.

Implicit in any discussion of local study and research, early identification and referral, study and diagnosis, and treatment in a community program of prevention is the concept of coordination of all community resources and social systems so that any child or family requiring help can get the kind of services needed and at the strategic moment of need. Effective coordination will remain a vain hope or a professional fantasy until the city has established an overall community organization representing all child and family agencies, public and

private, with full-time executive personnel trained to plan, coordinate, and steer the activities of this umbrella organization.

10) The positive aspects of delinquency should not be ignored.

The communication channels between the adolescent subculture and the adult culture are seldom open and clear. Many youths unconsciously communicate to the adult society by way of their norm-violating behavior that "something is wrong" within the adolescent subculture or in the individual's personal makeup. A delinquent act can serve as an SOS signal which the adult community cannot afford to ignore.

The Boston Delinquency Project (Miller, 1959) represents an effort directed toward prevention in a community-based delinquency program. The project took place in the Roxbury area of Boston. Various aspects of the program were concerned with the community, the family, and the street-corner gang, all having the objective "to inhibit or reduce the amount of illegal activity engaged in by resident adolescents [p. 235]."

Miller has summarized the theory upon which this project was based in the following statement. During the age period from 12 to 19, the dominant use of influences on the behavior of members of lower-class adolescent groups derive from the group's conception of prestige-conferring behavior and valued objectives. At this age, intrafamily relations and standards of behavior set by parents have relatively little influence on the adolescent's day-by-day behavior. These factors, however, may have played a role in his becoming a corner-group member.

Lower-class delinquency is positively motivated as a result of participation in the mores of the lower-class culture. For the adolescent male, theft, drinking, and fighting (which account for much of the behavior labeled as "delinquent" in this area) are all associated with assertion of manhood.

The project attempted to influence these factors that motivate behavior. Its principal target of change was the value system of the

corner group itself. It was felt that the behavior of the individuals involved would change accordingly if the values of this most powerful influence could be altered.

During the project, 21 gangs were contacted, 7 of which received intensive help by workers, and another 7 of which received only superficial attention. The age range was from 12 to 18 at the beginning of the project. Extensive observation records were kept by each individual worker. The main focus of the workers was on restructuring the gang into a formally organized club. The gangs who did not receive intensive attention were used as a control group. Three phases were considered to be discernible in the worker-group relationship; namely, relationship embellishment, behavior modification, and termination. Psychological concepts were utilized by having the worker act as an intermediary who discussed specific problems or cases with a psychiatric counselor and then returned to apply suggestions within the group environment. There was also extensive use of group-dynamics principles.

Three different indices were used to determine the effectiveness of the project:

1) disapproved forms of customary behavior (based on a standard somewhat more lenient than usual middle-class norms),
2) illegal behavior, and
3) court appearance rates.

No significant difference in rate for any one of these three indices was found for the experimental group from the beginning to the end of the project period.

In an effort to discover why workers had little impact, attention was turned to trying to determine what factors, specifically, did influence delinquency. A recent analysis of disapproved behavior, using the two main divisions of actions and sentiments, uncovered wide discrepancies between changes in sentiments and changes in actions. Sentiments

generally changed in the direction of the preference of the worker, while actions were affected little in amount or nature by worker activity. Once again, nonsignificant findings reported here should not be interpreted as a sign of no hope.

The use of group workers to "infiltrate" gangs and organize clubs in order to change values with adolescent youth is absurd. Values are determined in early life as was shown in Chapter II. If kindergarten teachers can identify high-risk children--and I believe they can--, then why do we wait until adolescence to try to "change" their values? It seems that we are arriving with far too little far too late in their lives. While we are overlooking the obvious, they may need to be delinquent to survive in a particular subculture.

Many states are presently immersed in comprehensive program development for neglected and delinquent youth. There are four state institutions for neglected and delinquent children, responsible to the Bureau of Family and Children's Services within the Iowa Department of Social Services. An examination of the major problem area faced by these four children's institutions may serve the purpose of illuminating the problems associated with the institutional management of these children. Children now being referred to institutions, more and more, tend to represent neglected and delinquent children who are socially or culturally deprived, having special behavior problems, brain damage, and/or moderate to severe emotional problems needing special and remedial education. As a result, all program areas within the institutions have to be strengthened considerably. The custodial protection of society from the criminal element philosophy cannot be considered a form of intervention. In fact, there is evidence to suggest that it increases antisocial behavior. These program areas include psychiatric services, social services, medical services, special educational services, and psychological services. The educational programs are being aimed more in the area of special and remedial education, and they

necessarily should be, as regular instruction has already failed with most of these children.

A recent project initiated at the Iowa Training School for Boys (Contemporary Studies Project, 1968) has been a family therapy program. The project began with 75 boys, randomly selected, with the primary assumption that children's problems do not exist in a "vacuum." The second assumption was that parents and siblings react emotionally to a boy's removal to the training schools and that a sensibility to these feelings must be resolved with social work support before the child can be returned home. No longer does it seem feasible to "treat" a child and then return him to an unprepared family. No attempt was made in this project to exercise any type of coercion. Were such means legal and readily available, the project would have considered them a hindrance. The major hypothesis for this study was that delinquency ". . . springs in most cases from psychosocial factors so far as we now know; the means of 'correction' then lie in responsiveness to the basic needs of the clients [p. 7]."

The steps involved in family treatment began by inviting the family to the training school at the time of the boy's placement. An interview with the family described the treatment program in general terms, while the treatment team obtained a picture of the family's receptivity, motivation, and resistances to further contact. The next step was to contact the project families by letter or telephone if it was estimated that they would be reasonably cooperative. In instances of the resistance (either demonstrated or anticipated), the initial contacts were made through field visits.

Regardless of the procedural means of initial contact with families, certain basic principles of approach prevailed throughout:

1) The "reaching out" was genuinely supportive, nonjudgmental, and nonpunitive.

2) The family's alliance as responsible "partners" with the staff team on behalf of the boy was sought.

3) The initial sessions were vital in establishing trust and hope; these qualities were patiently nurtured.

4) The initial meetings were discussion sessions and were not labeled or referred to as "therapy sessions" which might have been regarded as assaultive by family members.

5) With all but those few families who were highly motivated to search out points of failure (and who were easily reached to examine themselves and submit to such a device as a structured interview), contact was achieved by initially focusing on the index boy and his problems. Although this prolonged his status as the "identified patient," it was less intrusive and threatening to other family members.

6) With continued discussions of the boy's problems, the family's attitudes toward one another eventually emerge.

7) To the extent that the therapists are perceived as non-threatening and supportively responsive to individual basic needs, defensiveness is decreased. The focus is then slowly shifted from the index boy to intrafamily tensions as well as to individuals other than the index boy [p. 9].

The following steps were essential to the relationship with the family group:

1) The "analytical" phase in which the team gains a "picture" of the family patterns of interaction;

2) having gained a picture of the family system, the team identifies the dysfunctional areas and makes them explicit, first to its own members and then;

3) to the family which is helped to develop more adequate ways of relating and interacting.

In these steps, the treatment team served in three therapeutic roles: (1) a mirror of interaction, (2) a communication model, and (3) a resource agent.

For grades seven through twelve, the project activities that were most effective were:

1) parental and family involvement in the problems of the delinquent child, and

2) reduction of class size and individual curriculum programming.

Two-hour treatment sessions were divided into three aspects:

1) The family and team met for 30 to 40 minutes;

2) The group divided with one therapist going for a separate interview with the father, another with the mother, and the third with the child; and

3) The entire group reconvened for about 45 minutes.

The success of the program has been measured in the recidivism reduction over the two-year period the program had been in effect. The conclusions by the author about the parent program are somewhat shocking. They see the needs of neglected or delinquent children residing in institutions requiring more than custodial care--they need to receive individualized treatment.

The year is 1972, and still we protect society by "locking up" children. But, of course, this is easier than fearing failure and attempting rehabilitative and habilitative programs. The children are fed, clothed, and even watered; but are they prepared for anything new? And if they are, will the environment be receptive?

> Many such children, and particularly delinquents, lack the insight that allows one to realize that life is based on one's interpersonal relationships and involvement with people within the family and social structures of his environment. Treatment, which has many forms including education, vocational training, counseling, and family living, offers a child the opportunity to become involved with and develop relationships with other people--particularly adult authority figures [p. 13].

We have just discovered the wheel! I hope!

Following a review of the psychological literature on delinquency, Quay (1965) developed a schema for the classification of delinquents on those ego and superego functions shown most frequently to be important.

This differentiation was based on:

1) delinquent attitudes toward conventional moral prohibitions (superego values);
2) their capabilities of controlling their impulses and of acting in accordance with their moral standards (ego strength); and
3) their affective response to their delinquent behavioral acts.

The typologies dealing with these concepts have not provided the most parsimonious model for assessment of those psychological, behavioral, and sociological variables which most investigators feel important. They are:

Type I or situational delinquents are defined as those adeolescents who have adequately internalized societal moral standards and who ordinarily adhere to these. They become delinquent as a result of situational factors producing some kind of stress experience. They seldom come to the attention of the courts and are not repeated offenders.

Type II or neurotic delinquents are defined as those whose moral attitudes are similar to those of nondelinquents. However, these moral standards are violated by delinquent acts, creating a disparity between their ideals of behavior and actions relevant to these ideals. The inability to act in accordance with personal standards is reflected in feelings of guilt and discomfort, producing a person who is frustrated, unhappy, and discontented with himself, manifesting a low self-esteem.

Type III or pseudo-socialized delinquents are defined as those whose moral values are patterned in accordance with a deviant set of standards in relation to the conventional moral code accepted by society at large. They do not show a disparity between their values and behavior in the commission of the delinquent act; therefore, they do not experience guilt feelings about the violation of conventional moral prohibitions. The behavioral controls of such delinquents may appear weak, but there is no reason to assume that this is the result of poorly developed ego functions. In fact, the evidence suggests that some

delinquents have adequate, if not exemplary, ability to act in accordance with their own standards of behavior. Such delinquents do not have poor ability to control impulses but merely the absence of a desire to do so where society expects they should.

Type IV or psychopathic delinquents are defined as those who do not have the moral attitudes characteristic of normal adolescents having developed poor behavioral controls. They do not experience either subjective guilt or a lowered self-esteem since there is only limited disparity between personal values and behavior. They are neither ashamed of their behavior nor particularly concerned in modifying it.

Rehabilitation of neglected and delinquent children has been a hit-and-miss affair. Polk, Pittel, and Mendelsohn (1969) have attempted to structure a system around the four types of delinquency just developed. The Type I situational delinquent was defined by adequate adherence to society's moral values and by socially acceptable controls. He may have a limited court or police record. His antisocial behavior is either a response to an immediate stress situation (such as a family crisis) or is the result of some physiological deficit (such as brain damage or physical deformity). His rehabilitation should be based on an accurate appraisal of the factors which have led him to act in a deviant way and should be oriented toward the prevention. The situational delinquent should not be exposed to the more committed delinquent since this may propel him into a more extensive delinquent role.

The Type II neurotic delinquent is one who has incorporated the dominant system of moral values but who is unable to regulate his behavior accordingly. The therapeutic task is to institute controls where they are inadequate and to reduce the intensity of conflict and guilt by the application of intensive individual or group psychotherapy. Such therapeutic services should be conducted in a noninstitutional setting to prevent the development of a more extensive delinquent identity. Exposure to psychopaths or pseudo-socialized delinquents provides him

with stimuli which would further encourage him to resolve his conflicts by acting them out. When the control of impulses for some neurotic delinquents is so limited that placement in a restricted setting is required, every effort should be made to isolate them from other delinquent types.

According to this theory, the adolescent who scores low on moral attitudes and high on ego strength does not become delinquent because of any psychological condition, but because he has internalized a deviant set of moral values to which he adheres when he acts in an antisocial manner. The rehabilitative task with such an adolescent is the alteration of his system of values so that they fall in line with those of the larger society. As the product of the values, beliefs, and behavior of the subcultural group to which an adolescent belongs, the preferred therapeutic strategy is an attempt to alter his values through the medium of his peer group. The severity of acting out of some Type III pseudo-socialized delinquents requires their institutionalization, even though a community-based program is preferable.

The Type IV psychopathic delinquent suffers from the most severe psychological deficit, having neither incorporated an adequate system of moral values nor developed sufficient behavior controls. More than any other delinquent type, he becomes a recidivist to instructions. The attempt to inculcate a system of moral values must follow the establishment of a modicum of self-control. It seems mandatory that the psychopathic delinquent be placed in a closed institutional setting that provides external sanctions. When he demonstrates self-regulation, he may be reinforced by a work program which provides a close relationship to a strong male figure.

The findings (Polk, et al., 1969) suggest that the classification of delinquents on the variables which define the proposed typology (especially on ego strength) can be used by probation departments and correctional facilities in assessing the likelihood that a delinquent will

become a repeated offender. For correctional officers and other professional personnel, who must carefully apportion their time, the variables of this research provide a potentially important tool for selecting those delinquents who require the most intensive service. The differential treatment approaches suggested by the findings of this research are detailed in the next section.

The Differential Treatment of Delinquent Types

It has frequently been argued in the literature that a variety of corrective methods must be applied to the delinquent population with the variety of forms which the delinquent personality assumes. The research provides evidence that there are several identifiable personality patterns and that successful treatment of the delinquent depends heavily on the accuracy with which the diagnosis of types is made and on the adaptation of appropriate treatment methods for each type. The research which provided the basis for differentiation among types of delinquents also formed the framework for formulating a strategy of differential treatment. It is by no means evident that psychotherapy provides the most appropriate corrective method for all delinquents, but it is quite apparent that unless delinquent behavior is the result of psychological stresses, psychiatric treatment is hardly likely to cause its disappearance. It has been cautioned that the application of psychotherapy to some delinquents may result in a deterioration of personality rather than in its improvement (Erickson, 1956; Robison, 1960). Certainly, this research has suggested that a substantial proportion of delinquents (the pseudo-socialized) are psychologically healthy, and it is questionable whether they would benefit from a program of psychotherapy.

Adequate diagnosis and assessment procedures are extremely important if treatment is to be differentiated. Far too frequently the diagnostic scheme is a typical Wechsler or Binet-type test of academic skills or personality measures such as the Rorschach or Themetic

Appreception Test. Several tests have been used or developed for application with delinquent children. One such test measures the breadth and intensity of attitudes towards a wide range of violations of conventional prohibitions. This instrument, named What Teenagers Think (WTAT for short), consists of 50 items to be rated on a 5-point scale in terms of the degree of rightness or wrongness of the behavior of a fictitious character named Larry who is placed in a variety of specific situations. Each situation describes an act, frequently delinquent in nature, performed by Larry and provides information about his motives and the context in which the act occurs, rather than only supplying a classification of the moral or ethical abstraction underlying the behavior (for example, stealing). Included in this instrument are items relating to sexual behavior, aggression, personal dishonesty, relationships to parents, school officials, and legal authorities.

Another test measures the intensity of the subjective feelings of guilt and personal unworthiness. It consists of 38 true-false self-descriptive items dealing with guilt feelings, ways of reducing these feelings through punishment or other expiation, hypothesized childhood antecedents of guilt, and a variety of conceptually related items. These items were adapted from a subjective guilt scale which has been validated in similar research.

References

Adams, L. R. An evaluation of group psychotherapy with adult offenders. Crime and Delinquency, 1968, 14, 50-56.

Allyon, T., & Azrin, N. H. The token economy. New York: Appleton-Century-Crofts, 1968.

Arbuckle, D. S., & Litwack, L. A. A study of recidivism among juvenile delinquents. Federal Probation, 1960, 24, 41-46.

Atthowe, J., & Krasner, L. The systematic application of contingent reinforcement procedures (token economy) in a large social setting: A psychiatric ward. Paper read at the American Psychiatric Association Meeting, Chicago, Illinois, 1965.

Bower, E. M. Early identification of maladjusted school children. California Schools, 1955, 26, 21-37.

Briggs, P. P., & Wirt, R. D. The meaning of delinquency. In H. C. Quay (Ed.), Juvenile Delinquency. Princeton, New Jersey: D. Van Nostrand Co., Inc., 1965.

Buehler, R. E., Patterson, G. R., & Furniss, J. M. The reinforcement of behavior in institutional settings. Behavior Research and Therapy, 1966, 4, 157-167.

Buehler, R. E., & Richmond, J. F. Interpersonal communication behavior analysis: A research method. Journal of Communication, 1963 a, 13, 146-155.

Buehler, R. E., & Richmond, J. F. Pilot study on interpersonal communication behavior analysis method. Research Report, Board of Control, Salem, Oregon, 1963 b.

Burchard, J. D. A programmed environment for the habilitation of antisocial retardates. Personal communication, 1966.

Cloward, R., & Ohlin, L. Delinquency and opportunity: A theory of delinquent gangs. Glencoe, Illinois: Free Press, 1960.

Cohen, H. L., Filipczak, J. A., Bis, J. S., & Cohen, J. E. Contingencies applicable to special education of delinquents. Publication of the Institute for Behavioral Research, Inc., Silver Springs, Maryland, 1966.

Contemporary studies project: Juvenile delinquency in Iowa. Iowa Law Review, 1968, 53, 1119-1176.

Dewey, J., & Bentley, A. F. Knowing and the known. Boston: Beacon Press, 1949.

Erikson, E. The problem of identity. Journal of the American Psychiatric Association, January 1956, 4, 27-38.

Fairweather, G. W. The effect of selected incentive conditions on the performance of psychopathic, neurotic, and normal criminals in a serial rote learning situation. University of Illinois, Dissertation Abstracts, 1954, 6940, 394-395.

Freud, A. Adolescence. In The psychoanalytic study of the child. New York: International Universities Press, 1958, 13, 255-277.

Goldiamond, I. The maintenance of ongoing fluent verbal behavior and stuttering. Journal of Mathematics, 1962, 1, 57-95.

Graubard, P. S. Utilizing the group in teaching disturbed delinquents to learn. Exceptional Children, December 1969, 35, 267-273.

Johns, J. H., & Quay, H. C. The effect of social regard on verbal conditioning in psychopathic and neurotic military offenders. Journal of Consulting Psychology, 1962, 26, 213-220.

Kuypers, D. S., Evans, M. B., & Allen, P. A token system of reinforcement for residential treatment program for emotionally disturbed children. Project report by the Children's Research Center, University of Illinois, Champaign-Urbana, 1968.

Kvaraceus, W. C. Juvenile delinquency: A problem for the modern world. UNESCO, Paris, 1964.

Lawson, R. B., Greene, R., Richardson, S., McClure, G., & Pandina, R. The use of a token economy program in a correctional institution. Project report from the Dannemora State Hospital, Dannemora, New York, 1969.

Meichenbaum, D. H., Bowers, K. S., & Ross, R. R. Modification of classroom behavior of institutionalized female adolescent offenders. Research report from the Ontario Reception and Diagnostic Center, Galt, Ontario, 1968.

Meyer, H., Borgatta, E., & Jones, W. Girls at vocational high: An experiment in social work intervention. New York: Russell Sage Foundation, 1965.

Miller, W. B. Implications of urban lower class culture of social work. Social Service Review, 1959, 33, 219-236.

O'Leary, K. D., & Becker, W. C. Behavior modification of an adjustment class: A token reinforcement program. Unpublished manuscript, University of Illinois, 1967.

Ostrom, T. M., Steele, C. M., Rosenblood, L. K., & Mirels, H. L. Modification of delinquent behavior. Journal of Applied Social Psychology, 1971, 1, 118-136.

Parsons, T. Essays in sociological theory. (Rev. ed.) Glencoe, Illinois: Free Press, 1954.

Polk, F. F., Pittel, S. M., & Mendelsohn, G. Toward a psychological typology of delinquent adolescents. Paper presented at the Western Psychological Association, 1969.

Quay, H. C. Juvenile delinquency. Princeton, New Jersey: D. Van Nostrand Co., Inc., 1965.

Quay, H. C. Remediation of the conduct problem child in special class setting. Exceptional Children, 1966, 32, 509-575.

Quay, H. C., Werry, J. S., McQueen, M., & Sprague, R. L. Remediation of the conduct problem child in special class setting. Exceptional Children, 1966, 32, 509-515.

Richmond, J. F., & Buehler, R. E. Interpersonal communication: A theoretical formation. Journal of Communication, 1962, 11, 99-111.

Robison, S. M. Juvenile delinquency--Its nature and control. New York: Holt, Rinehart, and Winston, 1960.

Ross, R. R. Application of operant conditioning techniques to the behavioral modification of institutionalized adolescent offenders. Paper presented as an application for an CMHF research grant, September 1968.

Schwitzgebel, H. A new approach to understanding delinquency. Federal Probation, 1970, 24, 11-25.

Shannon, L. W. The problem of competence to help. Federal Probation, 1961, 25, 221-274.

Slack, C. W., & Schwitzgebel, R. A handbook: Reducing adolescent crime in your community. Privately printed, 1960.

Spielberger, D. C., Bernstein, I. H., & Ratliff, R. G. Information and incentive value of the reinforcing stimulus in verbal conditioning. Journal of Experimental Psychology, 1966, 71, 26-31.

Steffy, R. A treatment of schizophrenic patients by operant conditioning. Personal communication, 1966.

Stuart, R. B. Trick or treatment: How and when psychotherapy fails. Champaign, Illinois: Research Press, 1970.

Truax, C. B., Wargo, D. G., Carkhuff, R. R., Kodman, F., & Moles, E. A. Changes in self-concepts during group psychotherapy as a function of alternate sessions and vicarious therapy pretraining in institutionalized mental patients and juvenile delinquents. Journal of Consulting Psychology, 1966, 30, 309-314.

Tyler, V. O., Jr., & Brown, G. D. The use of swift, brief isolation as a group control device for institutionalized delinquents. Behavior Research and Therapy, 1967, 5, 1-9.

Tyler, V. O., Jr., & Brown, G. D. Token reinforcement of academic performance with institutionalized delinquent boys. Journal of Educational Psychology, 1968, 59, 164-168.

Wilkinson, L., Saunders, J. T., & Reppucci, N. D. The development of a behavioral system for an established institution: A preliminary statement. Project report presented at the Fifth Annual Meeting of the Association for the Advancement of Behavioral Therapies, Washington, D. C., September 1971.

Zimmerman, E., & Zimmerman, J. The alteration of behavior in a special classroom. Journal of Experimental Analysis of Behavior, 1962, 5, 159-160.

Chapter V

Current Models of Educational Management

The review of the literature, including an ERIC search under the most plausible descriptors, yielded fourteen publications which described educational programs for delinquent children. None of these studies resulted in a definitive statement on the worthiness of a given curriculum and, in fact, not one reported on a specific instructional procedure comparison. In short, the "state of the art" of most reported educational programs used in institutions for neglected and delinquent children is a broad spectrum of workables and nonworkables. The replicability of any of these programs from the descriptions given is essentially impossible.

It is not surprising, then, that as the team from the Wilkes College Educational Development Center traveled and visited facilities in the commonwealth of Pennsylvania, it found that most administrators had searched for a "goodness of fit" between various instructional procedures and their staff and children, developing a program literally from experience. The cost of this type of program development is extremely high. First, there is really no basis for comparison when a set of instructional procedures is gleaned from a million sources and amalgamated into a program that has no identifiable features.

But the real problem with such a compiled curriculum is that it operates without instructional rules to govern its use. When children succeed, it appears to be a successful curriculum; but the reasons for their achievement are unknown. However, when children fail to interact with their curriculum meaningfully, the reason for their failure stays hidden. More importantly, when a child fails the randomized curriculum, the user frequently does not know what alternatives are available, simply because an ordered, sequenced, instructional relationship or set of hierarchical tasks has not been established.

The content of this chapter should be a report of the data yielded from comparisons made when two or more curriculum techniques were used with a particular group of neglected or delinquent children. But in the absence of such data, or even a design emanative from the neglected and delinquent educational facilities, an alternative type of discussion was felt to be important.

In examining the educational facilities across the commonwealth, one point is evident. The educational facilities for the neglected or delinquent children have few, if any, trained special educators on their teaching staffs. Those that do have them have added them in the past two or three years. Already these people are impacting change in these institutions, primarily by revitalizing the existing curricula to include the broad program aspects of several of the exemplary programs happening in the education of emotionally disturbed children.

The focus of this chapter will be to report on a few of these exemplary programs in enough detail so that the reader can decide if he would be interested in modeling a program on their basis. This is not to say that he should. Obviously, one difficulty with these broadly based program models is that they fail to specify the instructional content. For this reason, the summary chapter of this review (Chapter VI) will provide one way of testing curricula against learner aptitudes. The suggested "aptitude by curriculum interaction design" is provided to enable an administrator and teaching staff to obtain data upon which a sound decision can be made for using or rejecting selected curricula for any program they choose to use.

The reader must realize that those who prepared and edited this review are not promoting any single approach that will cure all evils; they would far rather that the reader select a program base, or design one, and then utilize some systematic means of recording information derived from the teaching input in order to evaluate a specified piece of curriculum or to compare two or more curriculum procedures.

A Psychoeducational Model

The psychoeducational model utilized data from the areas of human development, school learning, mental health, and group dynamics. This model applies these data directly and indirectly to educational problems and activities. Some of the major assumptions underlying the psychoeducational model include the following:

1) Each pupil has his own learning style;
2) An educational environment must be constructed to deal with everything that affects the student; and
3) Each pupil has learning aptitudes which may interact with a specific curriculum more successfully than with other curricula.

This approach stresses the fact that all learning must be invested with feelings in order to contain meaning and purpose for the student. In addition, the teacher works at the child's current level of functioning, regardless of whether it is related to his chronological age or IQ. The model also emphasizes the need for collaboration with other members of the school and community (Long, Morse, & Newman, 1971).

An example of a psychoeducationally based program is the child-aide-teacher-mom program at Rochester, New York. The goal of this program is to intervene at the primary level with children who exhibit mild to moderate adjustment problems. The emphasis is on prevention as opposed to remediation. Preliminary investigations were undertaken which determined that it was possible to identify children in first grade who would experience adjustment problems in later grades.

The method chosen for the intervention program was the employment of carefully screened mothers as nonprofessional aides to work with children, under supervision, for two to three 30- to 45-minute sessions per week for an average of thirty-five sessions. The aides were selected on the basis of warmth, comfortable interpersonal relations, and the fact that they had been successful mothers themselves. Although

preliminary training was provided for the aides, they felt that it was less important than the on-the-job supervision they received.

In addition to the aides, the staff included a clinical psychologist, a school psychologist, a social worker, a community liaison representative, a research coordinator, and a part-time psychiatric consultant. The emphasis which these staff members placed on support and consultations with aides and other personnel has been cited as a key factor in the success of the program. One aspect of direct or primary service is the cost, as psychologists and social workers are expensive. In this case it was felt that by having the professionals instruct several nonprofessional employees, the cost factor could be greatly reduced. Each aide received two hours of individual supervision monthly from the psychologist on her team. Also available to the aides were regular seminars and seminars on crisis intervention given by the psychologist.

The child aides were neither psychotherapists nor remedial tutors. Their intervention consisted of forming warm, positive relationships with the children. Their methods included helping the children with school work, playing games, working in art media, and providing a great deal of conversation with the children. The program was not primarily instructional. The general goals were determined specifically for each child in a pre-intervention staffing. In addition to these goals, the aides always had some general objectives in mind for each session. Daily sheets were provided on which the aides marked the goal associated with each activity in which the children were engaged during the session. In this way, a record was available which was used for both future planning and for research. This program really capitalized on activating communication among the general community membership, parents, and the school administration.

The cost of a primary mental health team--consisting of ten half-time aides, a psychologist, and a social worker--was $42,000. This was 1.5 times the cost of the traditional mental health team--which consisted

of a psychologist and a social worker--but the primary mental health program team served 80 to 100 children on a twice-a-week basis while the traditional team served only 20 children once a week. Therefore, the accountability factor was definitely in favor of utilizing the nonprofessional teacher moms.

The Behavior Modification Model

The major goals of the behavior modification model are to identify those behaviors which interfere with learning and to establish behaviors which facilitate learning. The role of the teacher is to assist the child to modify his behavior and to increase the probability of his success in interacting with his environment. The teacher selects the tasks as well as the type of meaningful positive consequences for appropriate behavior. The focus is always on observable behavior, as opposed to inferred or measured psychological factors.

One example of a behaviorally oriented program for maladjusted children is the Santa Monica Project (Hewett, 1968). This program utilizes behavior modification methodology in conjunction with a developmental sequence of educational goals. This developmental sequence, according to Hewett, implies an orderly progression of stages, each occurring in relation to the other. The program is an attempt to apply these theories directly to the education of socially maladjusted children.

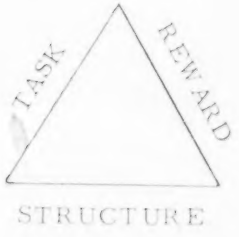
The following is the developmental sequence of educational activities: attention, response, order, exploratory, social, mastering, achievement. The first four task levels focus largely on the child as an individual at the readiness stage. At the social level, the child's gaining approval rather than attention is the major concern. The mastering level is concerned with the acquisition of intellectual and adaptive skills. The achievement level stresses the development of self-motivation and in-depth acquisition of skills.

The Santa Monica Project itself had a twofold purpose:

1) to develop the engineered classroom design in the public school, and
2) to evaluate its effectiveness with emotionally disturbed children.

The project classrooms were located within the regular building areas of the schools. Six female elementary school teachers were selected from among new teaching applicants in the Santa Monica School District. Only one teacher had previously worked with children with learning problems in public schools. The teachers underwent a two-week training period prior to working with the children. They were then assigned randomly either to a control classroom or to an experimental classroom. Eight teachers' aides were selected from housewives and graduate students. Experimental teachers were to adhere rigidly to the engineered design, including the giving of check marks every 15 minutes.

The student group consisted of 54 educationally handicapped children between the ages of 8 and 12. They were grouped into six classrooms of nine students each on the basis of IQ, age, and reading and arithmetic levels. The engineered classroom was based on three key elements: (1) the task, (2) the reward, and (3) the structure.



The task must be one that the child is ready to learn, that he needs to learn, and with which he can be successful. These tasks will be related to the child's deficits on the developmental sequence mentioned above. The reward schedule was based on the principles of operant conditioning. The structure of the program was all pervasive, from the

detailed description of the floor plan, arrangement of various centers, check-mark system, the task-oriented role of the teacher, the schedule, and the curriculum of the classroom, which was highly sequenced to promote success.

Hewett evaluated his program with three major questions in mind. The first dealt with the effects of rigid adherence to the engineered classroom on emotionally disturbed children who previously had been in a regular class. Statistically, significant results at the .05 level were reported in the area of arithmetic fundamentals as well as with mean task attention percentages.

The second area was concerned with the effect of the engineered classroom on educationally handicapped children who previously had been in a small individualized class which did not use a reward system based on the principles of operant conditioning. Again, statistical significance was obtained in the areas of arithmetic fundamentals and task attention.

The third question dealt with the effect of withdrawing the engineered classroom and reward system from children who had become accustomed to it. No significant differences were found with regard to this question.

Hewett concluded that the engineered classroom design was a good technique for helping children to get started in school. He reported that it did not appear necessary for most children to remain in the engineered classroom for more than one semester. He also concluded that the engineered classroom could be viewed as a transitional environment between the home and the more traditional school setting.

Another program which operates within the behavior modification model is the Therapeutic Educational Center (TEC) in San Francisco, California. TEC is a school consisting of 20 seriously disturbed children, aged 6 to 9 at enrollment. The children are selected for the program based on several criteria:

1) The child must exhibit the potential to function intellectually within at least the dull normal range;

2) The child must have a history of at least minimal verbal communication;

3) The child must be unable to remain in a public school for more than one hour a day;

4) The child must have no gross sensory or neural impairments which in themselves require special educational programs.

The Therapeutic Educational Center has five basic objectives. The first objective is to decrease the frequency of the pupil population's unacceptable behaviors so that certain defined behaviors are decreased from 50% to 75% one year after entry into the program. The second objective is to increase reading, arithmetic, and spelling achievement for those children whose skills are deficient so that by one year after entry into the program, their achievement will have increased at the rate of two months' growth for every one month of enrollment. The third objective is to organize a school program in which ordinary public school standards are maintained and the total school environment is operated on the basis of behavior modification principles. The fourth basic objective is to provide an exemplary program available to professionals and nonprofessionals for the purpose of observation and training in the use of behavior modification methods with severely disturbed children. Finally, the center attempts to identify some of the important operational and administrative factors that a public school district needs to consider in organizing a program for severely emotionally disturbed children.

The structure of the program is as follows. There are three groups of six to seven children, with one teacher and one aide responsible for each group. The daily schedule consists of nine half-hour periods. Each instructional team meets with the educational consultant over a week to review data on each child. The psychiatric consultant attends weekly staff meetings in which management strategies

are determined. A social worker prepares progress reports on each child every six weeks and also maintains contacts with the parents.

When a child is enrolled in the program, the process of formulating specific objectives is initiated. The first step is to collect baseline data on the child's social and academic behaviors. The staff makes a list of those behaviors cited in referral materials as being unacceptable in a regular school. The child's teacher then conducts systematic observations of those behaviors to establish the rate of their occurrence at the center. Diagnostic educational tests are also administered to each child during his first few days of enrollment. On the basis of the findings from the observations and educational tests, contingency management strategies are developed for improving social behaviors and academic performance, and a sequence of academic tasks is programmed for the child.

Except for occasional field trips, activities for the students at the center take place within the facility. Activities are broadly based and include intensive one-to-one tutoring in basic skills and small group instruction in basic academic skills. Individual and group activities are listening, role playing, outdoor group games, and independent-study periods.

Working with parents is considered secondary to the center's function in relation to the child. There are exchanges of information via the telephone on a regular basis once every six weeks but these exchanges may occur as often as several times a week during a crisis period. The staff social worker operates parent education groups, the focus of which is an introduction to applying behavior modification and precision measurement techniques.

Each child's progress is monitored in three different ways. Academic progress is measured daily by chart or performance rates. In addition, social behaviors are measured by direct frequency counts at intervals ranging from several times a day to once a month, depending

upon whether the remedial program is in the baseline, intervention, or follow-up phase. Finally, the entire staff evaluates each child's progress at least once every six weeks at the weekly staff meetings.

The termination process begins when the instructional staff decides that the child is able to perform academically at a level equal to that of the lowest functioning peers in the regular classroom and that the child can maintain his social behavior within acceptable limits. This decision is based on the child's daily performance. The social worker contacts the child's home school, and a class placement is chosen by the principal and the pupil services worker at the home school, in consultation with the child's teachers at the center. The child then visits the new school and if all goes well, the staff members at the center hold a conference to plan his termination date and their role in the child's adjustment period at the new school.

Follow-up procedures are individually determined. No systematic follow-up data were collected although the center staff has maintained informal contact with children who have returned to regular schools.

Another program which operates under the behavior modification model, but with a different slant, is the Social Learning Project (SLP) in Eugene, Oregon. The goal of the Social Learning Project's intervention is to restructure the aggressive child's environment so that his rate of deviant behavior is decreased and his rate of appropriate behavior is increased. This environmental restructuring, although it may take many forms, always involves the application of behavior modification principles. Some of the procedures used are described below. The training of teachers to reinforce the deviant child's appropriate behaviors more frequently and more systematically is stressed. Teachers are also trained to ignore the child's deviant behaviors as well as to establish contingencies with the child. Peers are trained to reinforce the deviant child for appropriate behavior and to ignore deviant behavior. Finally, a

program is set up for the deviant child that enables him to earn rewards for the whole class through appropriate behavior.

The methodology for achieving the above-mentioned goals is as follows. Baseline data are acquired by the SLP observers. Goals and procedures for intervention are established in conference with the teacher. In addition to these, the SLP psychologist is involved in the implementation of the classroom procedures. The program is set up to permit the phasing out of the psychologist's involvement. Followup and monitoring are undertaken by the SLP observers.

The frequency of sessions between the SLP consultant and the child, school personnel, peers, and parents varies with each child. Initially, there are daily contacts. These become less frequent unless deviant behavior is increasing. Intervention in both the school and the home is usually carried out by one psychologist.

School intervention procedures are generally conducted in the school setting--in the classroom, on the playground, or wherever the child is exhibiting behavioral problems. When a child is referred by the school, initial interviews are conducted with parents and school personnel. This is followed by classroom observation and the collection of baseline data. After baseline data have been collected, a planning conference is held. The intervention procedures are then explained to both the child and the class.

A "workbox"--a small box that has a counter and a light on one side--is demonstrated to the child and the class. The child can count his own points. The sessions begin with the psychologist operating the workbox. Baseline data are then collected in this manner, and the results are announced to the class. After this, the teacher is phased in. Reinforcement is then delayed, whereas it was given immediately during the first stage. After this, the workbox is phased out and a point system is instituted.

Another phase of the intervention is the use of behavioral contracts between the home and the school. This is initiated in situations in which the child returns to engaging in disruptive behaviors in the school after the psychologist has been phased out. The contract also facilitates communications between the school and the parents and vice versa.

The child is terminated and followup begins when school observational data indicate that the child's classroom behavior is similar to those of his peers, when teachers and parents are satisfied with the child's progress, and when his academic skill deficiencies have been corrected.

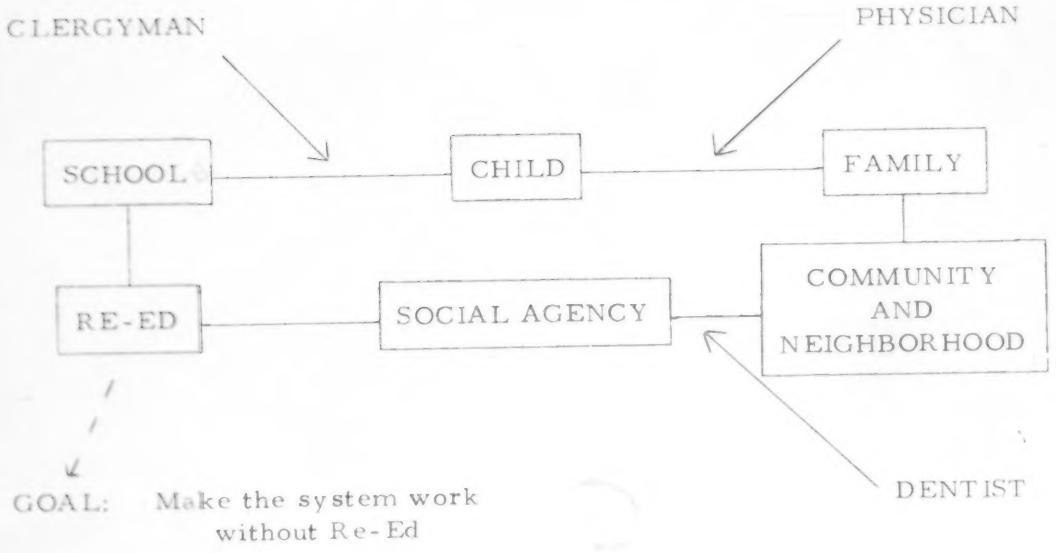
The Social Competence Model

The social competence model repudiates psychiatric treatment of emotionally disturbed children; the total commitment to individual and group psychotherapy; the preoccupation with the child's psychic life; and the theories of transference, regression, and resistance. It suggests instead a systems or ecological model of helping emotionally disturbed children. The social competence model assumes that the child is an inseparable component of an ecological unit which consists of his family, neighborhood, school, and community. The teacher is not concerned with adjusting the child to the reality of his system but rather to simultaneously modifying the child and the various parts of his system until a balance is obtained between environmental demands and needed social skills. For example, in residential care one must change both the child's behavior and classroom environment to fit the pupil. Similarly, to teach new job skills and social habits, one must alter the community to accept these skills and habits (Long, et al., 1971).

An excellent example of this model is Project Re-Ed. The Children's Re-Education Program is designed for mildly to moderately disturbed children who have average or above-average intelligence but who are often retarded academically. Re-Ed encompasses the child's

entire ecological system by contact with the child, his family, his school, his neighborhood, and his community. The purpose of Re-Ed is to promote behavioral change and increase skill competencies on the part of the child and his ecological system so that the child can successfully function within the system. The philosophy of Re-Ed contends that the entrance of the program into the child's life should be as brief as possible, granting time only for readjustments that would allow the child's successful reentry into an attuned environment.

The chart below (Hobbs, 1966, p. 1, 108) schematically illustrates the ecological system of a child.



The Re-Ed Program is used within the open setting of a 5-days-a-week residential school and also within established small group living situations (8 to 12 children per group) in which the child must interact with his peers. A three-member team of teacher counselors (day, night, and liaison) with the help of specialized teacher counselors, a diagnostician, and supervisors carries out a coordinated 24-hours-a-day

curriculum plan with a given group of children. The day teacher counselor is responsible for the execution of the morning classroom, placing emphasis on remediation and enhancement of specific academic competencies. The night teacher counselor extends daily activities by arranging evening experiences so that learning takes place in every informal learning situation. The liaison teacher counselor links the Re-Ed school with the child's ecological system.

The diagnostician gives an educational diagnosis and evaluation for each child. Assistance in program planning is also provided by psychiatric, pediatric, psychological, and educational consultants. Growth and developmental changes in the child and in his environment are the positive goals of the Re-Ed Program. These goals permit various philosophical and theoretical practices while maintaining some basic educational assumptions. Some assumptions are that emotionally disturbed children do learn; and that most emotional, social, and cognitive behaviors are learned. These assumptions are operationalized through an educational model in which the "treatment plan" is curriculum.

The following steps are involved in the curriculum design: gathering information, integrating data, developing specific goals, implementation, coordination, and evaluation. Teaching methods, materials, and techniques vary according to each child's learning style. Some skills learned in the classroom include the child's raising his hand for assistance, contributing appropriately to a group discussion, researching a topic of interest, or left-to-right ocular control which is necessary for reading. A short attention span may interfere with a child's performance; therefore, all tasks presented were designed for a specific duration of time, allowing for successful completion and reward. The time structure would gradually be lengthened.

The purpose of the clinical physical education program is for the remediation and development acquisition of basic sensory-motor skills.

It is also conducive to peer cooperation and group participation. Arts and crafts are designed primarily for creative expression and development of fine motor coordination.

The effectiveness of the Re-Ed curriculum design is evaluated by the competence of the child's social, emotional, and cognitive behaviors upon return to his natural ecological system.

An Educational Model

The educational model is based on the presumption that sound, systematic, and sensitive teaching can overcome a child's feeling of inadequacy and academic failure. The goal of this model is to provide success experiences in the classroom that will heighten a child's self-concept. Some principal concepts of the educational model have been formulated by Fagen, Long, and Stevens (1971).

1) Start at or below the functional level. Begin where the child is capable of handling the work, then gradually proceed to more difficult tasks. Tasks that cannot be simplified or modified should be avoided.
2) Increase difficulty by small steps. Gradually increase the difficulty of the work instead of taking large jumps in skill development.
3) Place teaching tasks in a developmental sequence. Higher-order skills should follow the development of lower-order skills. Divide complex tasks into separate parts and order them sequentially.
4) Provide positive feedback. Frequently praise the child either verbally or through gestures, pictures, charts, or videotapes.
5) Strengthen by repetition. Review often previous tasks that were performed.

6) Show appreciation for real effort. Instead of only acknowledging results, the teacher should show recognition for real effort. Success should be defined according to the child's baseline level and the progress he has made.

7) Enhance the value of the skill area. Meaningful change will not occur unless the child perceives as valuable the particular skill which is being taught.

8) Maintain flexibility and enjoyment. A planned program should always be subject to change. Interesting and enjoyable educational games will reduce boredom, fatigue, and restlessness. Field trips are also beneficial.

9) Prepare for real-life transfer of training. Transfer can be optimized by generalizing the learning tasks to numerous everyday activities.

10) Plan short, frequent, regular training sessions. Training sessions should not last longer than one-half hour and should be held daily at the same time each day.

Popenoe (1971) described a very successful "catch-up" program in Montgomery County, Maryland. All those in the program were between the ages of 8 and 14 years who had exhibited a severe learning disability, usually in reading. All had at least average intelligence and possessed no apparent organic or pathological problems. The catch-up classes developed out of a need to find a program for underachieving emotionally disturbed children who were referred for help. In the program, individualized instruction was given to a small ungraded group of children with similar learning problems. Emphasis was placed on giving the children successful learning experiences in order to build up their self-concepts. Much praise was given to each child. The child was also given only work with which he was sure to succeed. A 12-year-old may have been in the first grade reader and the third grade arithmetic book. Instruction was given according to need.

To assist the children in feeling more secure, the program was structured so that the children knew exactly what was to be done each hour of the day every day. After the children began to develop confidence in their ability and to feel at ease in their environment, they were able to work in groups. By joining the group, the teacher was able to help the child develop a sense of belonging. The child became aware that others liked him, and he in turn began to like others. As a result, the child no longer felt it necessary to defend himself against loss of esteem by aggressive or withdrawal behavior. His energies were vented toward learning.

The results of the catch-up program are very impressive. In 1964-1965 the average gain in reading was two years and one month and in the three other academic areas tested, the gains were very similar. Of the 206 children who have been enrolled in catch-up programs, approximately one-third have been able to return to regular classes after the first year and the others after the second year.

Educationally, one consistent theme present in the decision that runs throughout the study of delinquency or neglect is that the human aptitudes, or learning behaviors that relate to academic achievement, are faulty.

The concept that problems of delinquency are related to deficits in human behaviors is a relevant child development point of view. Behavioral deficits are generally considered to develop either due to poor training or a total absence of it. Another possibility is that the child might have been exposed to learning conditions that could be appropriate for other children but inappropriate for him.

Behavior problems often arise when a child is experiencing difficulty in the academic arena. A reading deficit, for example, might induce teasing and jibing. This presentation of aversive stimuli by "successful" children, and possibly even by the teacher, usually results in learning of an undesirable nature. The child begins to acquire

negative attitudes toward school, "escapes" through daydreaming and poor attendance, and exhibits such undesirable behavior as fighting and vandalism. The above is by no means a complete analysis of delinquency. However, it does point out some of the problems of learning that may occur in school.

What follows is a description of a program for training nonreaders to read. The program, which utilizes standard reading materials, is based on the principles of reinforcement, and tests it feasibility in remedial reading training. The study has implications for the evaluation of nonreading children of preadolescent, adolescent, and young adult ages. In the case discussed, the single subject was a culturally deprived delinquent child. The study, therefore, involves additional information and implications for the special problems associated with the education of delinquents, for it is never clear what the cultural relationship to delinquency really is.

Case Study

The youth was a 14-year-old Mexican-American boy with a history of delinquent behavior. He had continually experienced failure in school even though he had an IQ of 90. He had been in both a normal classroom setting and a juvenile detention home.

A token system was put into effect. The tokens were presented contingent upon correct responses and could be exchanged for items the child desired.

The SRA reading kit was used. Vocabulary words, silent reading, oral reading, and comprehension were stressed. Each story was accompanied with a presentation of the new words introduced in that story. A correct pronunciation of a word provided the student with a token. If the response was incorrect, the teacher provided the right answer. Then the student was given another chance to respond and to

receive a token. This continued until all the words on the list were read correctly.

The words were then presented in paragraphs to be read orally. A high-value token accompanied correct responses. After the oral reading, the subject was presented with the story and questions. He was to read the story silently and answer the questions that followed. During the silent reading, reinforcement was given on a variable interval scale for attentive behavior. Each correct response to a question was accompanied by a high-value token. If the questions were answered incorrectly, the subject had to reread the appropriate paragraph, correct his answer, and he then received a mid-value token. A vocabulary review was given after every 20 stories of the SRA materials had been read. Tokens were again presented for correct responses.

During the 4-1/2 month experimental period, 70 training sessions were held, with an average of approximately 35 minutes spent per session for a total of 40 hours of reading training.

Results and Conclusions of the Case Study

The subject showed a marked improvement in both his reading and his overall behavioral outlook. The reinforcement system lengthened the time he spent on a task. He also became more cooperative.

Out of the 761 new words presented, he retained 585 words. Results indicated that words were better retained when learned and read in context. Due to training, he was also beginning to learn to sound out words.

The general effect that the reading training had on the subject's performance in school was very encouraging. Not only did his behavior improve but he received passing grades in all subjects for the first time in his life.

It is important to note that the amount of reinforcement given decreases during the training, the reading performance is maintained in good strength throughout the sessions, and less and less reinforcement is needed for maintenance.

Curriculum

It was our intention to discuss in this chapter the instructional models in sufficiently enough detail that a teacher or administrator of a school program could adopt or adapt one of these paradigms to his program. The difficulty, however, is to offer the teacher enough curriculum detail so that they would know the materials to be ordered, the sequence of the instructional methods, and prescriptive instructional devices available for each instructional objective that may be formed. We have fallen far short of this goal simply because none of the program models reported specifies to any extent the curriculum materials used. To offset this deficiency, a very thorough search of all current commercially available curricula for neglected and delinquent children was made. Twenty-four such pieces of curricula were identified. These curricula are listed in Table 9, which gives the title, the publisher, the referral page(s), a brief description, and the price. The curricula identified are not representative of all the possible instruction devices, methods, or materials that can be used with neglected and delinquent children. Instead, they merely represent those curriculum items which have immediate applicability to the management of the child. The word "management" reflects story or reading material, films, parent attitude, family life, drug abuse, and alcoholism.

Summary

In the last chapter of this manuscript, a review of an alternative curriculum model is discussed. This review offers the reader a close

TABLE 9

CURRICULA FOR NEGLECTED AND DELINQUENT CHILDREN

	Title	Publisher	Page	Description	Price
1.	Becoming Delinquent	Aldine-Atherton	26	Correctional process for young offenders. (adult text)	$ 9.75, 4.95
2.	Judging Delinquents	Aldine-Atherton	32	Process in juvenile court. (adult text)	8.95
3.	Literature and the Delinquent	Aldine-Atherton	33	The Picaresque novel in Spain and Europe. (adult text)	5.95
4.	When Parents Fail	Beacon Press	5	A book about family breakdown; what happens to children when parents are judged unfit by the court.	12.50
5.	Freedom--Not License	Hart Publishing Co.	29	A book for parents about problems in child rearing.	4.95,
6.	Fox Fair	An Inner Ring Book by Alan Pullen		Texts from a reading series for delinquent junior high school children.	
7.	The Thing on the Line	An Inner Ring Book by Alan Pullen and Cyril Rapstoff		Texts from a reading series for delinquent junior high school children.	
8.	Alcoholism--The Disease	Maffex	65	A kit for use in the treatment and explanation of alcoholism.	69.50
9.	Like It Is	Maffex	61	Book of life in the inner city.	1.95

TABLE 9 (continued)

CURRICULA FOR NEGLECTED AND DELINQUENT CHILDREN

	Title	Publisher	Page	Description	Price
10.	Youth Dynamics	Maffex	84	Goal direction for adolescents.	$139.95
11.	Changing the Lawbreaker: The Treatment of Delinquents and Criminals	Prentice-Hall	464	Discusses forms of crime and delinquency and varied patterns of therapy that can be applied to offenders and examines research material in this area.	
12.	Delinquency Prevention: Theory and Practice	Prentice-Hall	463	Summarizes developments in prevention and indicates the direction of emerging trends.	
13.	Delinquent Behavior	Prentice-Hall	464	This study, citing statistics and recent research, stresses the social factors of delinquent control.	
14.	Juvenile Gangs in Context: Theory, Research, and Action	Prentice-Hall	464	Collection of 15 original and comprehensive papers dealing with juvenile gangs and the contexts within which they must be understood.	
15.	Schools and Delinquency	Prentice-Hall	465	Reviews ways that the school itself contributes to creating and maintaining delinquency.	

TABLE 9 (continued)

CURRICULA FOR NEGLECTED AND DELINQUENT CHILDREN

	Title	Publisher	Page	Description	Price
16.	Analysis of Delinquent Behavior--A Structural Approach	Random House	157	A new methodology for the study of juvenile delinquency which uses a multidisciplinary approach.	$ 2.95
17.	The Delinquency Label	Random House	158	Examination of the type of youth prone to delinquency.	5.95
18.	Juvenile Delinquency--A Reader	Random House	157	Collection of articles on the nature, extent, prevention, and control of juvenile delinquency.	4.95
19.	Juvenile Delinquency--An Introduction	Random House	157	Cultural influences, socio-economic patterns, and socioethnic commitments in evaluation.	8.95
20.	Young People and Crime	SMILE	1036	Book for adolescents.	4.50
21.	Children Against Schools: Education of the Delinquent, Disturbed, Disruptive	Western, PA	93b	Books and readings for teachers of delinquent children.	7.50
22.	Boy With a Knife	World Distribution	7	Film for adolescents. (rental)	9.00
23.	Hard Brought Up	World Distribution	7	Film for children and adolescents.	15.00
24.	Youth and the Law	World Distribution	7	Film for children and adolescents.	15.00

TABLE 9 (continued)

CURRICULA FOR NEGLECTED AND DELINQUENT CHILDREN

	Title	Publisher	Page	Description	Price
16.	Analysis of Delinquent Behavior--A Structural Approach	Random House	157	A new methodology for the study of juvenile delinquency which uses a multidisciplinary approach.	$ 2.95
17.	The Delinquency Label	Random House	158	Examination of the type of youth prone to delinquency.	5.95
18.	Juvenile Delinquency--A Reader	Random House	157	Collection of articles on the nature, extent, prevention, and control of juvenile delinquency.	4.95
19.	Juvenile Delinquency--An Introduction	Random House	157	Cultural influences, socio-economic patterns, and socioethnic commitments in evaluation.	8.95
20.	Young People and Crime	SMILE	1036	Book for adolescents.	4.50
21.	Children Against Schools: Education of the Delinquent, Disturbed, Disruptive	Western, PA	93b	Books and readings for teachers of delinquent children.	7.50
22.	Boy With a Knife	World Distribution	7	Film for adolescents. (rental)	9.00
23.	Hard Brought Up	World Distribution	7	Film for children and adolescents.	15.00
24.	Youth and the Law	World Distribution	7	Film for children and adolescents.	15.00

inspection of the diagnostic-prescriptive teaching process and aptitude-by-treatment research design paradigm as a means to demonstrate instructional effectiveness, or the lack of it, with institutionalized, neglected and delinquent children.

The reason for placing such a suggested curriculum design in the final chapter of this review and not in the "state of the art" chapter on instructional models is an attempt to magnify the limited nature of the current information level on instructional methodology within this context. It is interesting, and hopefully threat producing, that the behavioral scientists have generated a voluminous amount of research on the effectiveness of behavioral modification and behavioral therapy in less than ten years with this population, while educators have failed to report on twenty studies which compare the effectiveness of one curriculum for a given population with that of another. Yet, someone with a given group of children in an institutional setting makes a decision on what to teach each day and why to teach it.

The major unanswered question so obviously raised by this chapter is: How, or on what basis, is that decision made? In the next chapter, we strongly propose that a diagnostic-prescriptive teaching process be investigated, by which the teacher or administrator can begin to make decisions on evidence from the evaluation of whether or not a piece of curriculum satisfies the instructional objective in the time period set.

References

Fagen, S., Long, N., & Stevens, D. Teaching children self-control in the classroom. Columbus, Ohio: Charles Merrill, Inc., 1971.

Hewett, F. Introduction of the behavior modification approach to special education: A shaping procedure. In N. G. Harding, & A. H. Hayden (Eds.), Proceedings of workshop in instructional improvement: Behavior modification. Seattle, Washington: University of Washington, 1968.

Hobbs, N. Helping disturbed children: Psychological and ecological strategies. American Psychologist, 1966, 21, 1105-1111.

Long, N., Morse, W. C., & Newman, R. G. Conflict in the classroom: The education of children with problems. Belmont, California: Wadsworth Publishing Company, Inc., 1971.

Popenoe, E. P. Breakthrough for underachievers. In N. Long, W. C. Morse, & R. G. Newman (Eds.), Conflict in the classroom: The education of children with problems. Belmont, California: Wadsworth Publishing Company, Inc., 1971.

Chapter VI

Implications and Suggestions from the Review

The Question of Neglect

The first four chapters have been a "state of the art" description covering the characteristics, identification procedures, definitions, and behavioral and educational management of neglected and delinquent children. Indeed, it would be more appropriate to state that the majority of attention has been focused on the delinquent rather than on the neglected child simply because most library reference descriptions do not index the term "neglected." This simply suggests that human neglect is seldom referenced in the literature. When it is used, the term "neglect" appears in medical periodicals associated with physical neglect. Emotional neglect and, on a broader plane, cultural neglect are poorly defined concepts. The reasons simply may be that while the law provides for emotional neglect, it is a delicate matter to establish in court those parameters that might be construed as inhibiting the emotional growth of a child.

It is interesting to note that the most common grounds for divorce in this country is mental cruelty. Mental cruelty implies that the love relationship between a man and his wife--a relationship that may be vulnerable to abuse because love is conceived as an open, honest plane between people--is, in effect, harmful to the mental comfort of one of the two partners. Yet, in the efforts of this reviewer to determine those important factors related to childhood neglect, removing the extreme overtness of "child battering" and other forms of physical abuse, there is hardly any literature at all. In fact, the theories relating to the importance of maternal affect on child development (as discussed in Chapter II) have not generated a great deal of supportative data and are therefore mainly just that--theories.

It appears that clinicians and teachers are able to identify subjectively unloved and possibly unwanted children. But they are not

willing to substantiate their beliefs. The thought of developing systematic identification procedures designed to measure neglect in humans is so complex that few behavioral researchers have the necessary theoretical constructs to initiate such a task.

If this review fails to communicate any other point, it should clearly establish the fact that human neglect for children is a poorly understood and poorly agreed upon concept; it is one that should either be stated and defined in operational terms and research efforts initiated with it, or this concept should be dismissed from the laws as a symptom which clinical evidence may not support as a workable construct.

One suggestion based on the review of the literature would be that the commonwealth needs a state plan to attack the problem of childhood neglect and delinquency. This may be undertaken in two phases:

1) A taped conference with identifiable experts in several fields should be arranged. The tape of this conference could then be edited as a symposium for publication on the topic of neglect. This conference should be limited to ten participants who would provide their opinions on items from a previously prepared agenda so that they would have had time enough to "do their homework."

2) Then the empirical questions raised at this conference of experts should be ordered, by priority, by five or six professionals in responsible positions, for neglected children. The questions should also be rephrased as research designs in the form of miniproposals. Each of these designs should then be evaluated by outside experts and one or two of the best research designs should be developed into proposals for funding.

The Question of Adequate Statistical/Demographic Data in the Commonwealth

Jackson and Ligons (1966) appear to have prepared the last nationwide statistical survey of long-term treatment facilities for delinquents. In the United States 304 known institutions were surveyed; 292 were included in the study. Approximately 51,000 children (79% boys) were in institutions, or a ratio of 195 per 100,000 of the 10 to 17 age group in this country at that time. This is a 16% increase since 1964. In addition, over 50% of the youth in institutions stayed less than 9 months. Just slightly over 80% of the institutions were operated by states, with the remainder either under city or county management. Four of every ten facilities were overcrowded with a ratio of 2.2 children to a total staff. The average per capita operating expenditure of each institution was $3,345 with a total gross expenditure of $184 million. Table 10 summarizes the national and geographic division.

It would appear that an office of demographic data may be vital to the commonwealth's effort to attack this problem systematically. It would be modeled in the commonwealth at the state level similarly to the one operated on the Gallaudet College campus in Washington, D.C., where information is collected on deaf institution agencies and children. It is recommended that the commonwealth initiate such a data collection and reporting effort for the children in juvenile delinquency treatment and detention centers. Even with the cost of development of the forms, postage, and data treatment, it would not be a costly undertaking to begin a survey this year.

Questions on Instructional Implications for Institutionalized Delinquents

One of the most comprehensive sources of information on behavioral and instructional management is the booklet entitled Opening Doors Through Educational Programs for Institutionalized Delinquents, available upon request from the Superintendent of Documents,

TABLE 10

ANNUAL EXPENDITURES AND PER CAPITA OPERATING EXPENDITURES OF PUBLIC INSTITUTIONS FOR DELINQUENT CHILDREN, BY DIVISION AND TYPE OF INSTITUTION, 1966

Geographic Division by Type of Institution	All Expenditures[a]	Expenditures		Average Daily Child Population	Per Capita Operating Expenditures
		Operating	Capital		
All Divisions:	$183,254,915	$163,437,151	$19,817,764	48,730	$3,345
Training Schools	156,284,138	139,248,591	17,035,547	42,312	3,291
Forestry Camps	15,504,289	14,761,437	742,852	4,390	3,363
Reception & Diagnostic Centers	11,466,488	9,427,123	2,039,365	2,153	4,379
New England Division:					
Training Schools	9,105,993	8,966,938	139,055	2,143	4,184
Reception & Diagnostic Centers	703,087	603,085	100,002	185	3,260
Middle Atlantic Division:					
Training Schools	28,104,725	21,996,375	6,108,350	4,543	4,842
Forestry Camps	1,559,834	1,554,537	5,297	339	4,586
South Atlantic Division:					
Training Schools	19,925,294	18,483,122	1,442,172	6,823	2,709
Forestry Camps	986,493	868,607	117,886	385	2,256
Reception & Diagnostic Centers	267,812	267,612	200	106	2,525
East South Central Division:					
Training Schools	13,047,541	11,281,939	1,765,602	5,850	1,929

TABLE 10

ANNUAL EXPENDITURES AND PER CAPITA OPERATING EXPENDITURES OF PUBLIC INSTITUTIONS FOR DELINQUENT CHILDREN, BY DIVISION AND TYPE OF INSTITUTION, 1966

Geographic Division by Type of Institution	All Expenditures[a]	Expenditures		Average Daily Child Population	Per Capita Operating Expenditures
		Operating	Capital		
All Divisions:	$183,254,915	$163,437,151	$19,817,764	48,730	$3,345
Training Schools	156,284,138	139,248,591	17,035,547	42,312	3,291
Forestry Camps	15,504,289	14,761,437	742,852	4,390	3,363
Reception & Diagnostic Centers	11,466,488	9,427,123	2,039,365	2,153	4,379
New England Division:					
Training Schools	9,105,993	8,966,938	139,055	2,143	4,184
Reception & Diagnostic Centers	703,087	603,085	100,002	185	3,260
Middle Atlantic Division:					
Training Schools	28,104,725	21,996,375	6,108,350	4,543	4,842
Forestry Camps	1,559,834	1,554,537	5,297	339	4,586
South Atlantic Division:					
Training Schools	19,925,294	18,483,122	1,442,172	6,823	2,709
Forestry Camps	986,493	868,607	117,886	385	2,256
Reception & Diagnostic Centers	267,812	267,612	200	106	2,525
East South Central Division:					
Training Schools	13,047,541	11,281,939	1,765,602	5,850	1,929

TABLE 10 (continued)

ANNUAL EXPENDITURES AND PER CAPITA OPERATING EXPENDITURES OF PUBLIC INSTITUTIONS FOR DELINQUENT CHILDREN, BY DIVISION AND TYPE OF INSTITUTION, 1966

Geographic Division by Type of Institution	All Expenditures[a]	Expenditures		Average Daily Child Population	Per Capita Operating Expenditures
		Operating	Capital		
East North Central Division:					
Training Schools	$ 26,274,311	$ 22,147,997	$ 4,126,314	6,114	$3,623
Forestry Camps	2,548,810	2,363,394	185,416	636	3,716
Reception & Diagnostic Centers	3,375,724	3,310,683	65,041	832	3,979
West North Central Division:					
Training Schools	10,933,173	10,351,658	581,515	3,321	3,117
Forestry Camps	456,360	243,460	212,900	637	382
West South Central Division:					
Training Schools	12,075,764	10,923,020	1,152,744	5,355	2,040
Forestry Camps	131,155	117,989	13,166	43	2,744
Mountain Division:					
Training Schools	5,030,140	4,598,457	431,683	1,285	3,579
Forestry Camps	164,941	158,674	6,267	34	4,667

TABLE 10 (continued)

ANNUAL EXPENDITURES AND PER CAPITA OPERATING EXPENDITURES OF PUBLIC INSTITUTIONS FOR DELINQUENT CHILDREN, BY DIVISION AND TYPE OF INSTITUTION, 1966

Geographic Division by Type of Institution	All Expenditures[a]	Expenditures		Average Daily Child Population	Per Capita Operating Expenditures
		Operating	Capital		
Pacific Division:					
Training Schools	$ 31,787,197	$ 30,499,085	$ 1,288,112	6,878	$4,434
Forestry Camps	9,656,696	9,454,776	201,920	2,316	4,082
Reception & Diagnostic Centers	7,119,865	5,245,743	1,874,122	905	5,796

[a] This amount represents total expenditures, including outlay for capital improvement as well as operating costs, for only those institutions reported. The estimated total expenditure for all institutions is $184,083,738.

U. S. Government Printing Office, Washington, D.C. 20402. It reviews a variety of educational programs in correctional institutions which may have to be adapted under the new amendment to suit an open institution setting. It considers many types of instructional programs such as programmed instruction, team teaching, nongraded programs, summer achievement programs, vocational training, secondary work study, etc. It also includes a list of 32 selected publications which describe other educational and behavioral programs and procedures. (See Chapters IV and V.)

The data from this review and the many available publications, such as the one just mentioned, seemingly offer several generalizable findings on various educational programs. Initially, the striking phenomenon concerning these programs is that most are borrowed from regular education; that is, they were used in regular classes with fairly average achieving youngsters. The question, then, is: Can procedures used with normal achieving youngsters be applied to delinquent children, with or without some modification? Secondly, all the reported procedures either modify some extra obstreperous behavior or can be used in classes as a method to deliver a teaching material or technique. Nowhere was a curriculum comparison study reported on in the reviews searched. In fact, curriculum as the substance of education is discussed very little. It would appear that delinquents are a specific group with unique educational problems. The symptoms associated with these problems are poor academic achievement, lack of motivation, contrasting social values, and failure to relate to peers and persons in authority. These symptoms are typically displayed by the time they reach ten years of age. The problem, then, is to look past the presenting symptoms and attempt to identify instructional considerations and specific curricular procedures that are indigenous to this group. To merely transfer a linguistic reading program designed for ghetto children to an institutional setting for a broad range of delinquents does not necessarily make instructional sense.

The question raised may be a just criticism for most curricula as seen in delinquent detention or institutional settings. The youths gathered there seldom have very much in common with one another from an academic standpoint; the group probably is not instructionally homogeneous. The difficulty is that when the IQ's and chronological ages of any given group of children are similar, their learning interests or other aptitudes may not be similar enough, in fact, to indicate a common curriculum. Therefore, we strongly recommend an individualized, diagnostic-prescriptive curriculum.

Another suggestion is that target institutions in Pennsylvania be selected from those institutions in which samples of children can be assessed according to their perceptual and language aptitudes and academic achievement skills to date. In addition, the choice of learning modalities and the type of reinforcement that motivates them should be isolated. A graph of these aptitudes and skills can be plotted providing two diagnostic descriptors from which a diagnostic-prescriptive teaching relationship can be established.

Several attempts have been made to determine if most delinquents were, in fact, emotionally disturbed or had brain damage. The realization that they may or may not "fit nicely" into one of these diagnostic categories has little bearing on the type of instruction to be used. An alternative would be to determine the presence of a learning disability or to initiate a diagnostic study of those perceptual language aptitudes which relate to academic learning.

Although there is little agreement on the definition of learning disability, the National Advisory Committee on Handicapped Children, U. S. Office of Education (1968), defines it as follows:

> Children with special learning disabilities exhibit a disorder in one or more of the basic psychological processes. . . . They include conditions which have been referred to as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, developmental aphasia, etc. They do not include learning problems which are due primarily to visual, hearing, or motor handicaps, [or to] mental retardation. . . . [p. 34].

This definition differentiates learning-disabled children from those with mental retardation, sensory impairments, social-emotional problems, and cultural differences. It strongly suggests that perceptual language deficits are important characteristics. Thus, three major components, which should be measured by psychoeducational assessment, seem to characterize learning disability. These are: (1) perceptual deficit, (2) deficient academic achievement, and (3) at least average intelligence.

Intelligence may be defined as a central language ability which reflects the formation, association, and predication of symbolic concepts. Effective measurements require nonverbal scales to differentiate between a receptive-expressive language deficit and a central-conceptual language ability. A balance of verbal and nonverbal items is to be recommended. Children in the six- to eight-year-old age range may be assessed with a balanced combination of (1) the verbal information, similarities, and vocabulary subtests of the Wechsler Scales and (2) the nonverbal information, similarities, and vocabulary subtests of the Pictorial Test of Intelligence. An imbalance of scores obtained on these tests is suggestive of possible central-conceptual language development difficulties. Generally, a nonverbal IQ of less than 85 or a language deficit of a year and a half below chronological age (recognizing that as the chronological age increases, this discrepancy grows larger) is the lower limit for accepting a child as having normal language concept formation structures. Normal intelligence is emphasized because the popularity of the term "learning disability" may, in part, be attributable to the general acceptability of the term by parents and school officials over that of other handicapping conditions, for example, mental retardation. Some, but not most, mentally retarded children may be learning-disabled children as indicated by perceptual or academic deficits which are considered greater than would be accounted for by their

lower than average intelligence. Most learning-disabled children are of average intelligence.

Perceptual ability may be defined through the measurement of the performance level of the auditory or visual modalities and the integration of these two modalities. It is important to measure the specific subskills of discrimination, sequencing, and retention of these two modalities. A perceptual deficit in performance is identified when the developmental level achieved in a specific modality is not commensurate with the central conceptual language function of the child. The importance of assessing each perceptual modality must not be overlooked since in the past much attention has been paid to visual perceptual development with relatively little concern being shown for auditory perception. The strengths and weaknesses of a given modality, in comparison to those of another, may be an important consideration in planning educational management.

Academic achievement deficits may be found in any of the skill areas of reading, writing, spelling, or arithmetic. An identifiable feature of learning disability is performance on word recognition, reading vocabulary, reading comprehension, arithmetic reasoning, or number computation at a level which interferes with the child's achievement in other academic areas and causes him personal social discomfort within the classroom.

In summary, the three major components which must be assessed in diagnosing learning disabilities are:

1) balance between receptive-expressive language skills and the ability to formulate symbolic language concepts;
2) balance between test performance of the perceptual modalities, perceptual integration, and central conceptual language skills; and
3) the presence of specific achievement deficits which interfere with academic learning or which are manifested as situational anxiety, creating a personal social reaction in the school setting.

Implications for the Establishment of Curricula Research Design

A Diagnostic Systems Approach. Educational management models are needed to explain how and when to intervene with the most appropriate instruction. Thus, a diagnostic study of how each child receives environmental information by the sensory organs, perceptually interprets the information as meaningful symbols, and converts these symbols to language concepts, becomes important. These processes have been described as central information processing (Chalfant & Scheffelin, 1969). Associated with these processes is the study of behaviors which may prevent interpretation of environmental information.

Sabatino (1968) developed a descriptive model which shows that environmental stimulation begins as sensory input in the receptors, where it is coded neurally for transmission to the perceptual centers. Perception is the interpretation of sensory information into meaningful units for further relay to the language reception centers. In these centers, language is formed into symbolic conceptual units. The higher centers must be able to receive, express, associate, and mediate symbolic conceptual units in a systematic manner if language is to be used normally. The model implies that the integration, sequencing, and storage (memory) of perceptual information are from both visual and auditory intake. Perception follows. Arousal occurs as the interconnection between a meaningful perceptual experience and the transmission of that perceived information to the appropriate conceptual units within the cortical language centers. This last point has important educational implications. A lack of arousal may be the reason that certain information cannot maintain a child's attention and therefore is not directed into the symbolic conceptual centers where it can be "learned." Figure 2 is a graphic display of the information processing model.

Several investigators (Haring & Ridgway, 1967; Ryckman, 1967; Sabatino, 1968; Sabatino & Hayden, 1970 a, 1970b) used factor analytic designs to identify the central information processing behavioral

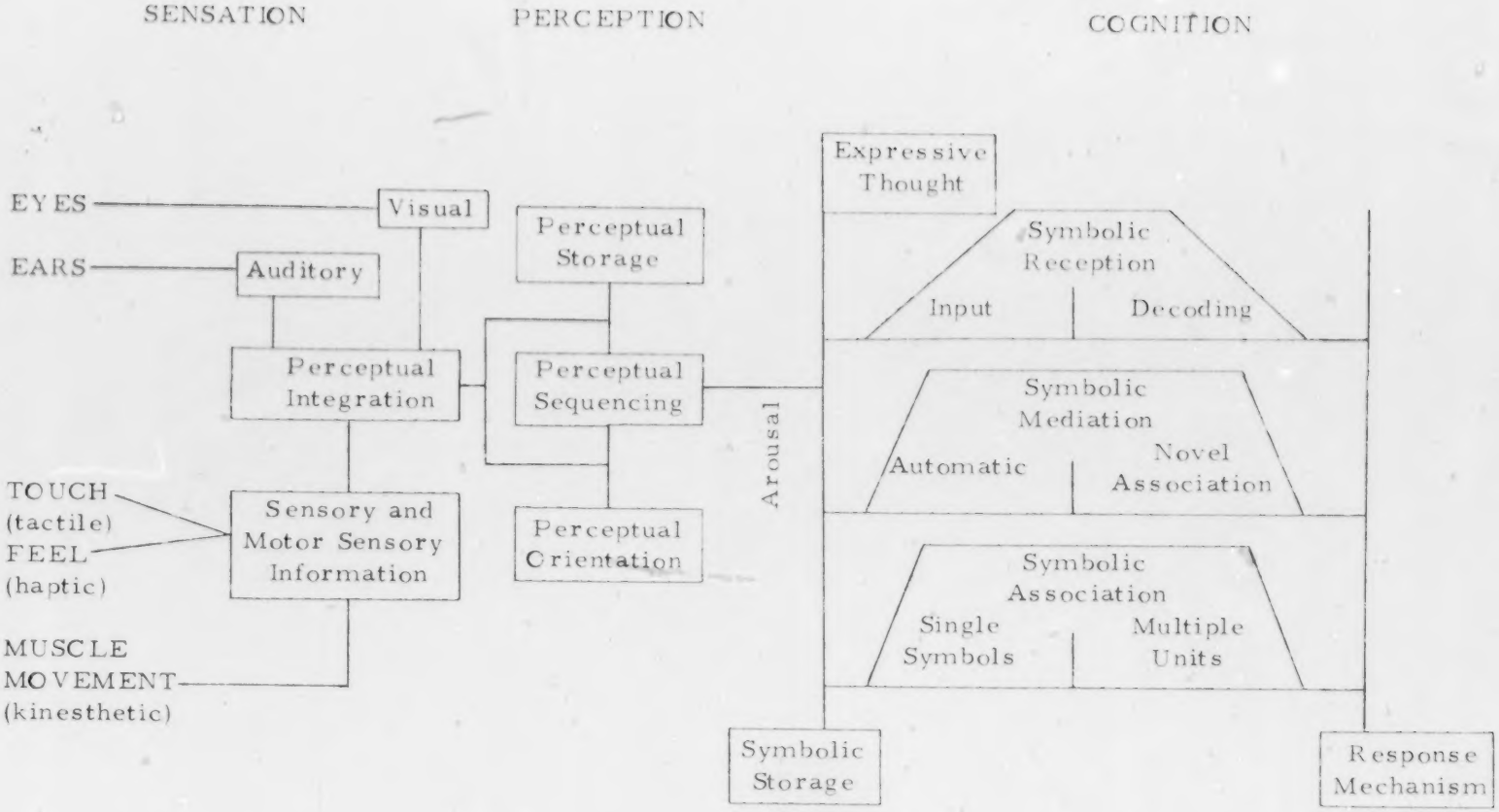


FIGURE 2

THE MODEL USED TO DESCRIBE THE INFORMATION PROCESSING BEHAVIORS

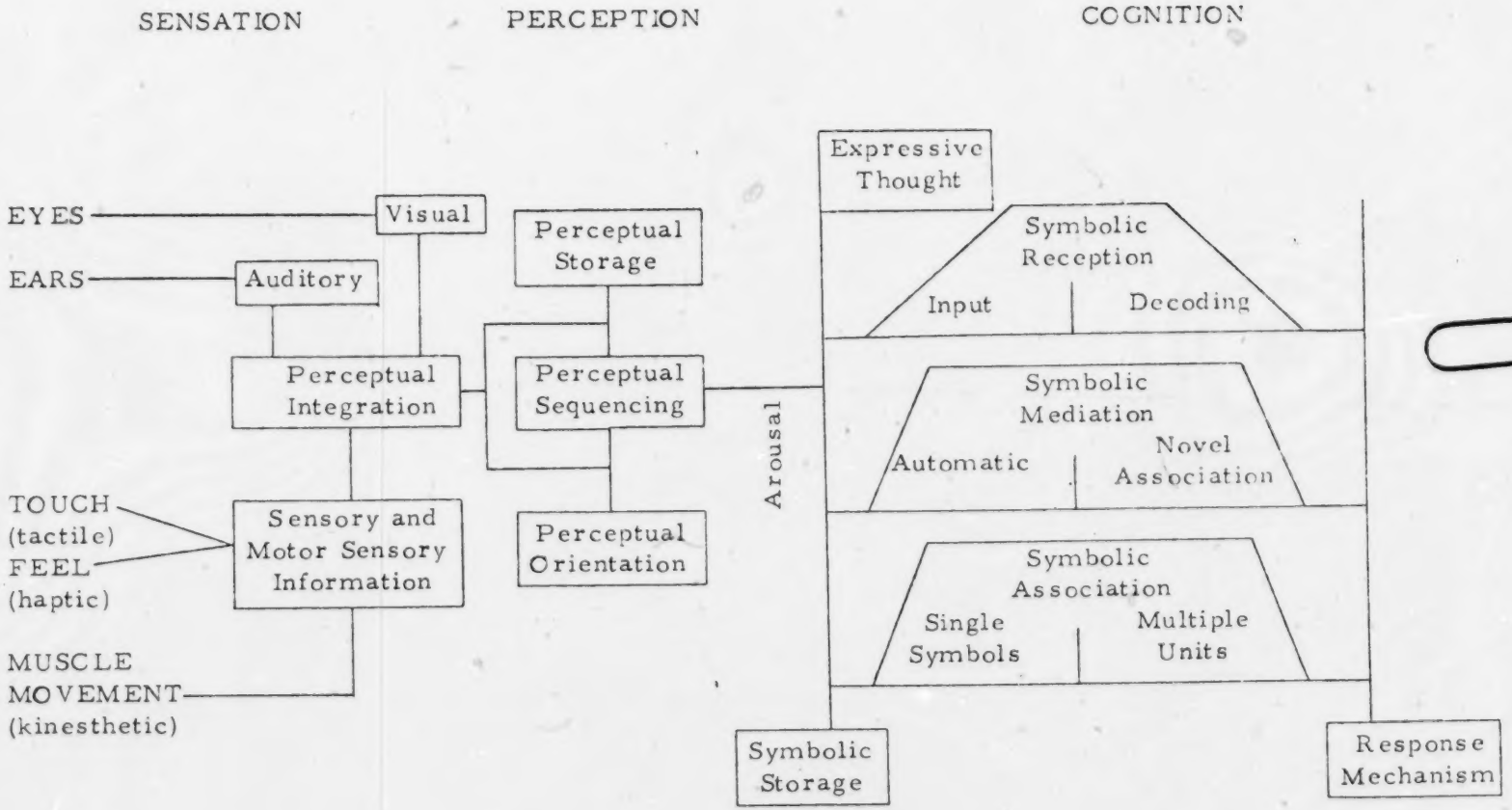


FIGURE 2

THE MODEL USED TO DESCRIBE THE INFORMATION PROCESSING BEHAVIORS

correlates of academic failure. Haring and Ridgway (1967) screened 1,200 kindergarten children. They found that children who had been identified as possessing potential learning disabilities by their teachers--with the diagnosis "confirmed" through psychological testing--demonstrated few common identifiable learning patterns. Of 31 variables measured, the most significant were the language variables which accounted for 20% of the communality in the principal components analysis.

Sabatino (1968), utilizing the information processing model, examined 23 commonly administered psychoeducational instruments to measure central information processing behaviors in 45 learning-disabled boys ages 6 to 12. Intercorrelations among the various tests and subtests of these instruments indicated that perceptual problems may occur as a single disability within the visual or auditory modality or as an auditory-visual integration perceptual error. Varimax rotation of the correlation matrix revealed the following four major factors to explain learning disability:

1) a perceptual factor containing various visual perceptual behaviors;
2) an auditory perceptual factor;
3) a perceptual memory-spatial relations factor; and
4) a language association factor.

Sabatino and Hayden (1970 a) used a similar battery with 243 learning-disabled children, divided on the basis of chronological age (over 9.6 and younger than 9.6). Factor analysis supported the generally held developmental hypothesis that six to nine years is the maximum growth period for perceptual development, and that after age ten, integrated language skills become of primary importance. The implications for teaching are that learning-disabled or high-risk children need more concentrated perceptual stimulation and development in the primary grades, and during this period they should not be

permitted to use language skills to compensate for perceptual deficits. For children above the age of ten, however, there seems to be little reason to continue nonlanguage-cued perceptual training.

Sabatino and Hayden (1970 b) administered a battery of tests to all children failing the elementary grades in a Maryland county school system with the intent to identify the information processing behaviors related to learning disability and educable mental retardation. The results are reported in the two tables for the tests used. The factorial treatment obtained when the 472 children failing in school were divided according to age (Table 11) and according to verbal language ability (Table 12).

Factor analytic treatment of the data obtained revealed that variation in language and perceptual functions discriminated between the two groups. Within the diagnostic category, however, there was no homogeneity that could be considered a constancy for educational management. Regardless of etiology, educational management procedures for children who are failing the regular curriculum must therefore be viewed systematically for each child. Again, the same four central information processing behavior complexes which relate to learning disability were found. These were auditory perception, visual perception, central conceptual language (the ability to retain and form concepts), and receptive language (the ability to interpret written and oral communications). Central information processing behaviors may be measured by formal and informal testing with a variety of evaluation instruments.

It is not our intention to sell the point of view that information processing behaviors are the only viable systematic means of diagnosis for educational purposes. Rather, the point is to stress the need for establishing a systematic view of the behaviors which may relate to learning. If we use assessment devices which sample the abilities, skills, subskills, or behaviors which are related to academic

• TABLE 12

FIVE PRINCIPAL COMPONENTS OBTAINED BY ORTHOGONAL FACTORIAL ROTATION OF THE TWENTY-FIVE VARIABLES

Subtest Variables and Teacher Indexes	9,6 and Below - CA						9,6 and Above - CA					
	I	II	III	IV	V	h^2	I	II	III	IV	h^2
1. Chronological Age	.62	.01	.22	.04	.02	.44	.39	.14	-.36	.19	.35
2. WISC Information	.21	.14	.10	.07	.70	.57	.24	.11	.60	-.08	.45
3. WISC Comprehension	.12	.02	-.07	.14	.62	.42	.30	.01	.64	-.04	.51
4. WISC Similarities	.07	-.03	-.05	-.03	.63	.41	.16	-.01	.63	-.09	.44
5. WISC Vocabulary	.08	.08	.04	-.12	.74	.58	.15	.06	.71	-.05	.54
6. WISC Digit Span	.21	.14	.15	-.04	.42	.27	.20	-.20	.23	.00	.14
7. WISC Coding	.40	.14	-.01	.08	.29	.27	-.03	-.04	.46	-.08	.23
8. BVMGT Copying	-.03	.02	-.06	.60	.16	.40	.08	.07	.08	-.20	.06
9. BVMGT Memory	.01	.07	.03	.69	.09	.50	.10	-.13	.29	.02	.11
10. Motor Time	-.02	.00	.30	-.06	-.01	.10	-.05	.29	.04	.11	.10
11. Motor Accuracy	.01	-.07	.09	-.13	.28	.12	.00	.19	.02	-.12	.05
12. Laterality	-.01	-.20	.13	.22	.00	.11	-.17	.19	.20	.09	.12
13. ITPA Auditory Vocal Automatic	.62	.11	.04	.06	.50	.67	.61	.26	.34	.08	.57
14. ITPA Auditory Vocal Association	.52	.13	.15	.11	.51	.60	.72	.17	.26	.01	.63
15. TAP Auditory Discrimination	.40	.17	.21	.30	.43	.53	.33	.02	.02	.08	.12
16. TAP Auditory Memory	.53	.08	.04	-.06	.46	.52	.60	.06	.26	.03	.44
17. TAP Auditory Comprehension	.53	.08	-.01	.12	.50	.56	.47	.05	.39	.02	.38
18. Birch Auditory Visual Integration	.49	.09	.07	.23	.29	.40	.41	.15	-.03	.14	.22
19. Directionality	-.06	-.11	.14	.25	.22	.15	.34	-.02	.07	.08	.13
20. Gilmore Reading Comprehension	.31	.07	.27	.16	.04	.21	.23	.32	-.05	-.02	.16
21. WRAT Word Recognition	.12	.14	.58	.07	.31	.48	.17	.64	.20	-.03	.49
22. WRAT Arithmetic	.47	.15	.47	.05	.35	.60	.18	.52	.09	-.04	.32
23. Vegetative-Autonomic	.08	-.81	.02	-.17	.16	.73	-.15	.00	.16	.78	.67
24. Perceptual Discrimination Index	.10	.54	.23	.05	.05	.36	-.01	.37	.22	.51	.45
25. Social Emotional Index	.01	-.76	.07	-.02	.09	.60	-.09	.10	.20	.76	.65
Variance	10.5	7.1	4.0	5.0	15.0	41.6	9.8	5.2	11.0	6.5	32.5

TABLE 11

FACTORIAL TREATMENT OF THE TWENTY-FIVE VARIABLES FOR BOTH SUBJECT GROUPS

Subtest Variables and Teacher Indexes	Principal Components for LD[a] Group				Principal Components for EMR[b] Group			
	I	II	III	IV	I	II	III	IV
1. Chronological Age	.72	-.26	-.05	.28	-.33	.07	.72	.23
2. WISC Information	.23	.63	-.12	-.12	.53	.02	.31	.06
3. WISC Comprehension	.06	.55	-.06	-.03	.56	-.05	.19	-.03
4. WISC Similarities	.06	.45	.12	.12	.32	-.10	.06	-.05
5. WISC Vocabulary	.16	.58	-.07	-.11	.66	.04	.10	-.06
6. WISC Digit Span	.32	.26	-.07	-.34	.36	.00	.20	.09
7. WISC Coding	.23	.24	-.04	-.03	.21	.19	.17	.18
8. BVMGT Copying	.13	.02	.01	-.29	.02	.12	.17	.43
9. BVMGT Memory	.13	-.04	-.16	.27	.07	.09	.20	.59
10. Motor Time	.03	-.03	.07	.31	-.09	.13	.12	-.10
11. Motor Accuracy	.02	.16	.13	-.29	.09	.02	-.07	.13
12. Laterality	-.01	.16	.21	.50	.15	.11	-.04	.10
13. ITPA Auditory Vocal Automatic	.78	.24	-.16	.09	.12	.09	.72	.16
14. ITPA Auditory Vocal Association	.80	.23	-.11	.03	.13	.01	.67	.33
15. TAP Auditory Discrimination	.41	.26	-.07	-.09	.14	.13	.44	.40
16. TAP Auditory Memory	.73	.14	-.14	-.11	.20	.03	.64	.17
17. TAP Auditory Comprehension	.67	.22	-.11	-.02	.29	.09	.61	.22
18. Birch Auditory Visual Integration	.66	-.01	.02	.11	-.04	.11	.56	.31
19. Directionality	.06	.30	.11	.15	.10	-.10	.08	.40
20. Gilmore Reading Comprehension	.42	.10	-.06	.05	.00	.07	.41	-.01
21. WRAT Word Recognition	.49	.25	-.05	.32	-.12	.20	.59	.02
22. WRAT Arithmetic	.67	.18	-.13	.08	-.15	.22	.75	.09
23. Vegetative-Autonomic	.04	.08	.76	-.18	-.02	.81	-.05	.09
24. Perceptual Discrimination Index	.18	.11	-.54	.03	-.02	.60	.16	-.03
25. Social Emotional Index	.07	.00	.81	-.15	.06	.75	-.03	-.09

a Learning Disabled

b Educable Mentally Retarded

achievement, we may enhance our understanding of those aspects which inhibit learning and, at the same time, obtain a scientific data base for the children in detention centers and institutions across the commonwealth.

Baseline Data. A second area of concern for the school personnel faced with learning-disabled children should be an endeavor to utilize educational management techniques in a precise manner delineated on the basis of previous data. Bateman (1964) viewed the diagnostic process as a "successive narrowing" up until the time the problem area is disclosed and the remedial process is begun. Such a microdiagnosis of behaviors related to learning disabilities is the point of initiation into the prescriptive process, which is the heart of educational management. In his hierarchical information processing model, Sabatino (1968) points out the necessity of experimentally studying the order of and interrelationship among behaviors which are seemingly important to academic learning and school adjustment. The behavioral units in the hierarchy are theoretical constructs which are testable since operational definitions are provided for them. The model leads one to focus on teaching as a systematic enterprise rather than an art, and on the necessity to collect empirical data for each of the behavioral components (variables) in the hierarchy. If such data can be obtained to support relative strengths or weaknesses among the variables, then information processing behaviors can become an initial point for diagnostic-prescriptive teaching. Once enough data have been collected so that specific academic and/or therapeutic decisions can be made we will no longer have to search for the "golden method" advocated by some "authority" who will answer all learning problems. Diagnostic teaching within the confines of systematic behavior assessment makes possible the design of instructional objectives and an effective remedial prescription. Such a selective educational management plan is discordant to a contemporary

approach which seems to hold that if enough information is exposed, some of it should take hold.

It is anticipated that in the future, teachers of delinquent children in institutions will not work from books in a graded series using one method, but rather will work from prescriptions based upon a recent assessment of accomplishment. In one educational management plan, they might then utilize pertinent aspects of many different instructional strategies based upon some known academic or behavioral characteristic. Too many educators still teach without any baseline data relative to why certain teacher action fails to help some children to learn.

Delinquent children who fail are often blamed for causing the failure, as if they planned on coming to school to literally reject education. Too often teachers work from curriculum guides which do not suggest that they present particular information specifically directed to a recognized set of behaviors for children and in keeping with things that interest them. Little thought is given to the questions of how children may learn or what changes in teaching style would best affect their learning. More importantly, when learning disabilities are found, systematic data collection is usually missing. Much baseline information needs to be collected and analyzed systematically if we are to effectively know about the inhibitors of learning abilities and their prevention.

Psychological Reporting. This is another area in which the teacher-psychologist relationship could profit from new approaches. Psychological reports have been, at best, a feeble form of communication between psychologist and teacher. The diagnostic summary and recommendations are the important parts of the psychological report. Psychologists should work to reduce verbiage in reports to produce a more clearly read learning profile. With appropriate preparation in staff meetings, such a profile would offer specific educators a diagnostic summary and a graphic picture of academic achievement. In the hands of a psychologist-educator team, this information could contribute to the

establishment of viable instructional objectives and to more exact learning and behavioral management techniques in the form of teaching prescriptions. An example of a learning profile is shown in Figure 3.

The essence of this ability-achievement profile, established on the basis of an idiographic assessment of those perceptual and language behaviors which seem to relate to academic achievement, is to increase communication while pinpointing objective behaviors for discussion. Academic skills are also reported here. Once a chronological age line is drawn across the face of the profile, a predicted achievement level (PAL) can also be plotted based upon the verbal and language comprehension functions. The remaining test information is obtained from commonly used clinical tests, and these, as well as the academic achievement tests, are converted to developmental age equivalents. (For suggestions on appropriate tests, see Sabatino, 1968; Sabatino & Hayden, 1970 a.) The profile is an easily read diagnostic indicator of behaviors postulated to underlie academic achievement, and it serves as a baseline against which further diagnostic academic remediation or behavioral training can be evaluated. Moreover, teachers can be instructed through in-service sessions to use it meaningfully.

A Team Relationship. Cooperation between all the disciplines that work with delinquent children is essential. Work with other educational specialists is also necessary in many instances. In developing a teaching prescription based upon the school psychologist's diagnosis, input from the teacher regarding the classroom environment and the materials available should be obtained. For example, a given child's visual perceptual discrimination must be compared to his visual perceptual retention, and both of these must be compared to the auditory perceptual counterparts. By comparing development of the perceptual and language functions on a profile, which also specifies the central information processing behaviors, the teachers, social worker, physician, and psychologist can jointly derive an initial teaching

FIGURE 3

PSYCHOEDUCATIONAL DIAGNOSTIC PROFILE

Name _____ School _____

C.A. _____ District _____

Grade _____ County _____

hypothesis. The initial teaching hypothesis should provide for the validation of teaching in relationship with instructional objectives. These objectives are best developed when the teacher and the school psychologist have a comprehensive description of the child's behavior. An example of an initial teaching statement, with a listing of behavioral descriptors, is found in Figure 4.

The initial teaching prescription is obtained by re-recording the developmental age equivalents from the profile (Figure 3) onto the initial teaching record (Figure 4). The team then decides upon realistic goals. A prescriptive teaching method is specified to reach the instructional goals and the needed materials are listed. The time period during which the prescription is to be employed should also be specified. A behavioral log should be maintained to determine if the prescription is modifying the behaviors or academic skills delineated in the instructional objectives.

Too many team members function as isolated diagnostic agents only; they are fearful of the educational treatment programs because they do not know various instructional courses of action that well. The advantage of the multidisciplinary team over the isolated individual effort is that a management plan can evolve which incorporates beneficial suggestions from each discipline and which results, hopefully, in comprehensive and effective instructional management.

While it is true that most team members are not usually experts on curricular methodology and materials, they must be knowledgeable enough to help in planning instructional objectives on the basis of their findings. However, the special educator is the key member to develop a diagnostic-prescriptive package for continued validation by the teacher.

Validation of the Diagnostic-Prescriptive Teaching Model.

"Diagnostic-prescriptive teaching" is a concept currently in vogue among school psychologists. Writers such as Bannatyne (1968, 1969), Bateman (1967 a, 1967 b), Capobianco (1964), Frostig (1967), Johnson and Myklebust (1967), Kirk and McCarthy (1961), McClurg (1970),

FIGURE 4

INITIAL PRESCRIPTIVE TEACHING RECORD

Name of Child _____ Date _____ I. D. No. _____

Resource/Classroom Teacher _____ / _____

School _____ District _____

Statement of Instructional Objective(s):

1. Instructional objective(s): _____

2. Prescriptive teaching method(s): _____

3. List, by name, specific materials used: _____

4. The initial prescription was used _____ _____
number of minutes days each week

5. Recommend continuation _____ _____ _____
number of minutes days each week

Descriptors:

List, in order of priority, the descriptors used in reaching the instructional objective(s).

C.A. ___
Language Age Equivalent ___

Perceptual Integration
__cross modal transfer
__inter modal transfer

Adaptive
__pre-vocational
__vocational
__other: specify
_____

Motor
__upper involvement
__lower involvement
__manual-motor
__eye-motor
__ataxia
__dyskinesis

Visual Perception
__discrimination
__retention
__sequencing

Language
__receptive
__expressive
__vocabulary
__mediational
__vocal-motor

Laterality
__ambidextrous
__left stability
__right stability
__directionality
__cross mid-line

Auditory Perception
__discrimination
__retention
__sequencing

Academic
__word recognition
__reading comprehension
__arithmetical reasoning
__arithmetical computation
__spelling

Other: specify
_____
_____
_____

Hearing _____ _____
left right

Vision _____ _____
O.S. O.D.

Evaluation sheets attached _____

Sabatino (1970), Schiller and Deignan (1969), and Wedell (1970) have called for diagnostic-prescriptive teaching. The term implies well-identified strategies for educating learning-disabled children based upon the results of differential psychoeducational diagnosis. The psychoeducational assessment and the diagnostic-prescriptive model have been hailed by Bateman (1967 a) as representing the "new scientific pedagogy." Bateman has put the issue well in her statement that:

> If each child has posted on the front of his desk a profile view of his present level of development in areas such as understanding what he hears, categorizing ability, visual memory, etc., with the normal development sequence of ability in each area clearly spelled out, . . . [the teacher] could see at a glance (a) where the child is, (b) what step comes next, and (c) the types of classroom activities suitable to move him a bit higher up the ladder [p. 12].

The diagnostic-prescriptive model is based upon the assumption that specific variables have been empirically related to different methods of achieving common educational goals, and also upon the assumption that currently used diagnostic instruments validly assess the specific variables.

The diagnostic-prescriptive model becomes viable only if significant aptitude-treatment interactions can be demonstrated. A comprehensive review of aptitude-treatment interaction research has been provided by Ysseldyke and Sabatino (1972). Reynolds (1963) and Reynolds and Balow (1972) indicate a great need for research that shows how aptitudes and instructional systems can be joined optimally in educating exceptional children. Cronbach (1957) urged psychologists with an interest in experimental work to join educators in observing the effects on subjects of different characteristics and to conduct investigations to find aptitude-treatment interactions. Despite repeated pleas in the literature for research designed to identify aptitude-treatment interactions, few investigations have been designed to do so.

According to Bracht (1970), the goal of aptitude-treatment interaction research is the identification of significant disordinal

interactions between variables (that is, IQ, specific abilities such as grammatic closure and figure-ground perception, personality, background, etc.) and alternative treatments. Aptitude information, per se, is likely to be of little value in attempts to adapt instruction unless it can be demonstrated that the aptitude interacts with specific modes of instruction (Cronbach, 1967).

Aptitude-treatment interactions may be either significant or nonsignificant. Those that are significant may be either ordinal or disordinal (Lubin, 1961). In Figure 5 the hypothetical situation is presented in which information concerning children's scores on the Test of Auditory Perception does not aid in predicting the relative effectiveness of alternative methods (phonics versus visual word recognition) in reading instruction. Both low and high scoring children, in this case, profit more from phonics than from visual instruction.

A hypothetical case of ordinal interaction is presented in Figure 6. In this case the treatment lines cross even though the interaction effect, as reported by an analysis of variance, may not be significant. Information concerning children's performance on the Test of Auditory Perception would aid us only by telling us that children who score highly on this test achieve higher word recognition scores when a phonics approach is used. This particular ability measure does not tell us that children should be assigned differentially to instructional programs; all the children profited more from phonics than from visual instruction.

Bracht and Glass (1968) have operationally defined an interaction as disordinal when the differences between alternative treatments and two levels of aptitudes are both significant from zero and different in algebraic sign. A treatment is inferentially disordinal if it is significantly different for children who have demonstrated low auditory perceptive ability (for example, visual instruction in Figure 6) than a treatment for children who have demonstrated high auditory perceptive ability (phonics instruction in Figure 7). If, as illustrated in Figure 7,

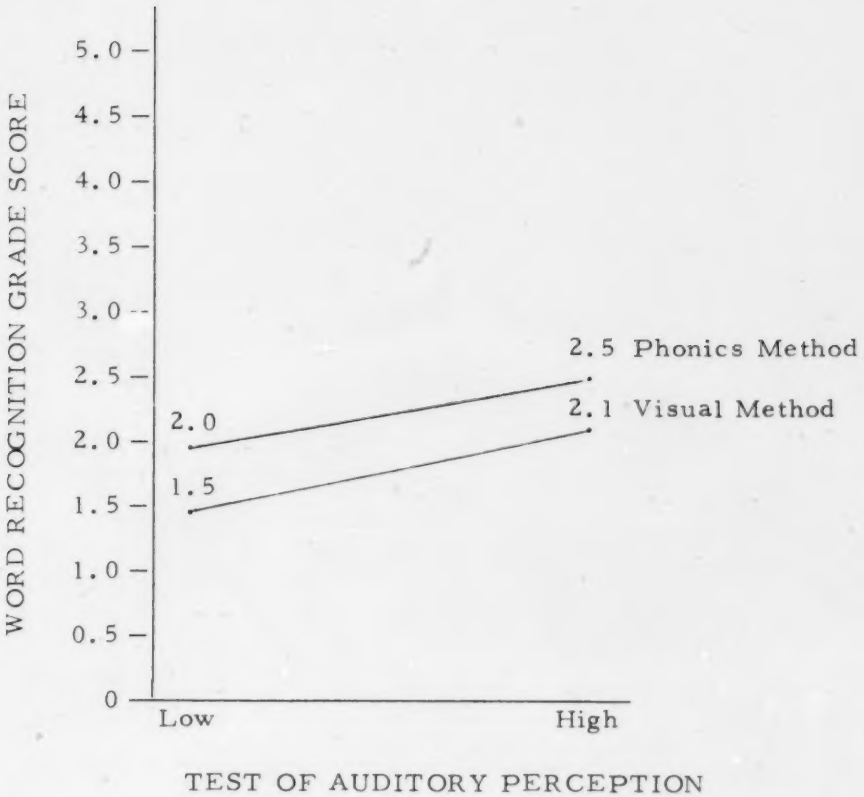


FIGURE 5

HYPOTHETICAL NONSIGNIFICANT INTERACTION BETWEEN TWO LEVELS OF SOUND BLENDING ABILITY AND TWO ALTERNATIVE INSTRUCTIONAL METHODS OF TEACHING WORD RECOGNITION

From: Ysseldyke, 1973, p. 14.

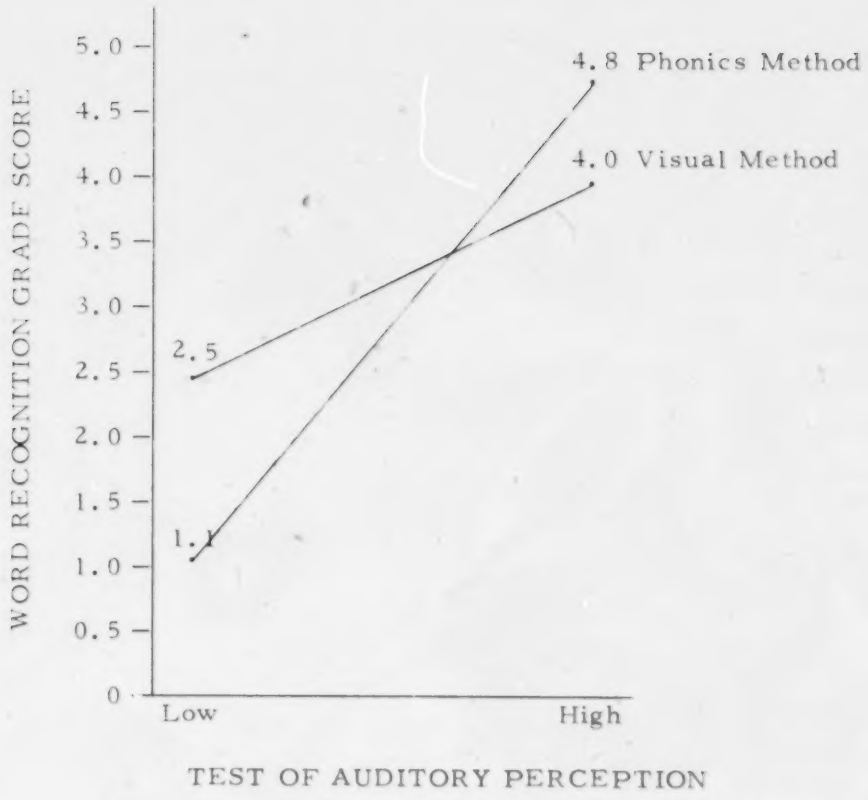


FIGURE 6

HYPOTHETICAL SIGNIFICANT INTERACTION BETWEEN TWO LEVELS OF SOUND BLENDING ABILITY AND TWO ALTERNATIVE INSTRUCTIONAL METHODS OF TEACHING WORD RECOGNITION

From: Ysseldyke, 1973, p. 15.

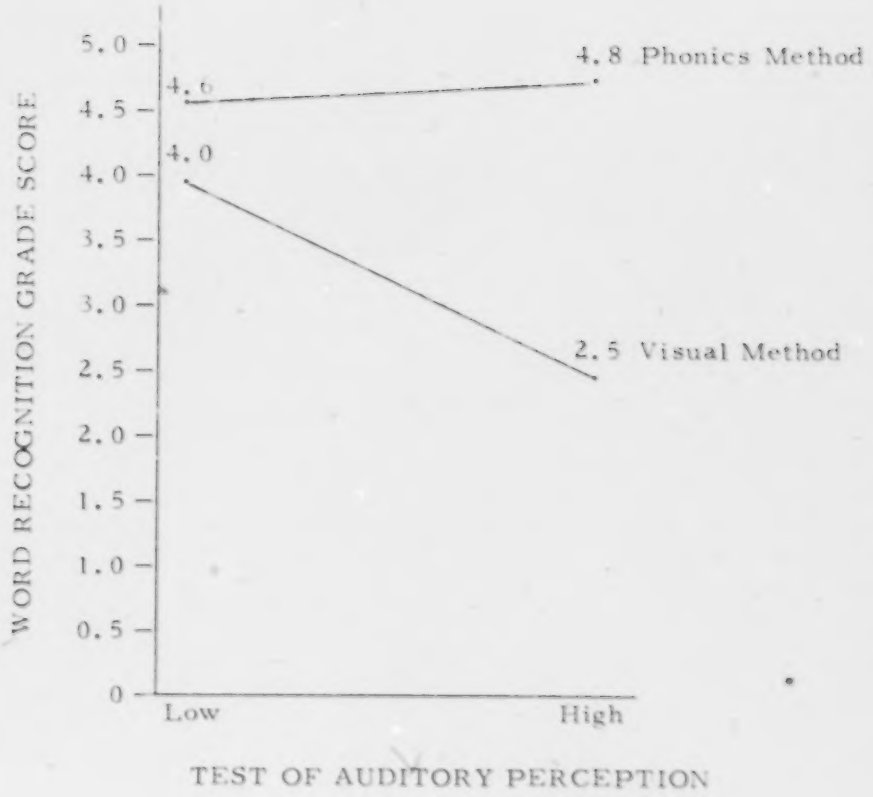


FIGURE 7

HYPOTHETICAL SIGNIFICANT INTERACTION BETWEEN TWO LEVELS OF SOUND BLENDING ABILITY AND TWO ALTERNATIVE METHODS OF TEACHING WORD RECOGNITION

From: Ysseldyke, 1973, p. 14.

there is a nonsignificant treatment difference (for the high ability group in this case), the interaction is still regarded as ordinal. The argument holds primarily for aptitude-treatment interaction research using a treatments-by-levels factorial design. The mere crossing of regression lines is not a significant criterion for the existence of a stable aptitude-treatment interaction.

Five aptitude-treatment interaction studies using handicapped children as subjects (Bateman, 1968; Bruininks, 1967; Janssen, 1971; Sabatino & Ysseldyke, 1972; and Sabatino, Ysseldyke, & Woolston, 1972) have failed to demonstrate significant aptitude-treatment interactions.

Bateman (1968) compared the efficacy of auditory and visual approaches to the first grade reading instruction of auditory and visual learners when children were grouped homogeneously on the basis of preferred learning modality and when they were heterogeneously grouped. Children were identified as auditory or visual learners on the basis of their performance on the auditory sequential memory subtest and the visual sequential memory subtest of the Test of Auditory Perception. One class of each modality preference group received auditory-dominant reading instruction (Lippincott series) while one class in each group received visual-dominant reading instruction (Scott-Foresman series).

The Gates Primary Word Recognition and Paragraph Reading tests were administered to all children at the end of the first grade (experimental year). Scores were averaged to obtain a mean reading grade. Labeling children who earned an "average reading grade score" of 3.9+ as "good readers" and those who scored below 2.9 as "poor readers," Bateman (1968) found that the auditory method of instruction was superior to the visual method in all groups. In the placement classes, the "auditory learners" performed in a significantly more superior manner than did the "visual learners." Although there was no

significant aptitude-instructional method interaction, Bateman concluded that one should teach to strengths if the child is an auditory learner and to weaknesses if the child is a visual learner.

Bruininks (1967) conducted an investigation to ascertain the extent to which teaching to a perceptual strength would aid in word recognition skills. His results were in direct contrast to those of Bateman. Six visual perceptual and six auditory perceptual measures were administered to 105 Negro boys, and two groups containing 20 subjects each were formed by subtracting T scores of the auditory measures from those of the visual measures. Group I demonstrated visual perceptual strengths but auditory perceptual weaknesses. Each of the 40 boys was taught to recognize 15 unknown words by a visual teaching procedure and 15 unknown words by an auditory teaching procedure. Analysis of variance resulted in a nonsignificant F ratio for interaction between perceptual strength and instructional method. Both groups learned better by visual methods.

Sabatino, Ysseldyke, and Woolston (1972) reported the results of a study designed to ascertain the extent to which the learning efficiency of mentally retarded children would be increased when a specific auditory or visual perceptual strength was matched to a unisensory perceptual curriculum. A test battery traditionally used to assess language, perceptual and academic skills was administered to 106 mentally retarded children. The results of the testing revealed that mentally retarded children could be differentiated as showing patterns of high and low performance on the visual perceptual and auditory perceptual measures used. Subjects were randomly assigned to three groups on the basis of visual or auditory perceptual strengths. Groups I and II each contained 24 subjects--12 with visual perceptual strengths and 12 with auditory perceptual strengths. Group III, a Hawthorne group, had 20 subjects--10 with each preference.

The design of the two-phase study is illustrated in Table 13. During phase one, Group I received auditory training, Group II received visual training, and Group III played games with the experimenters. During phase two, Group I served as a control, Group II received visual training, and Group III again served as a Hawthorne group.

Visual and auditory training resulted in better performance on visual perceptual and auditory perceptual post-test measures. However, the gains were not specific to the kind of training received, and the children assigned to the Hawthorne group demonstrated gains similar to those who received specific sensory perceptual training.

Sabatino and Ysseldyke (1972) attempted to evaluate diagnostic-prescriptive teaching with handicapped children referred for psychoeducational evaluation. A design similar to that used in the study described above was employed. Children were grouped on the basis of visual perceptual and auditory perceptual strengths, and the efficacy of respective training with two groups was compared. Visual perceptual and auditory perceptual training resulted in increased performance for all three groups. There were, however, no significant gains in reading achievement. No significant aptitude-treatment interaction was observed.

Janssen (1971) also attempted to validate diagnostic-prescriptive teaching procedures with kindergarten children. The memory subtest of the Test of Auditory Perception (Sabatino, 1969) and the sentences subtest of the Wechsler Primary and Pre-School Intelligence Test (WPPSI) were used to identify children with auditory perceptual strengths. The Developmental Test of Visual Perception was used to identify children with visual perceptual strengths. Janssen investigated the effect of letter discrimination training prescriptively matched to the child's modality of strength on the length of time it took the child to learn to recognize previously unknown words.

TABLE 13

EXPERIMENTAL DESIGN OF THE TWO-PHASE STUDY TO DETERMINE THE LEARNING EFFICIENCY OF MENTALLY RETARDED CHILDREN USING AUDITORY AND VISUAL PERCEPTUAL METHODS

GROUP	SUBJECT CELLS	PRE TEST	PHASE I	POST TEST	PHASE II	POST TEST
I	AUDILE VISILE	X	AUDITORY TRAINING	X	CONTROL	X
II	AUDILE VISILE	X	CONTROL	X	VISUAL TRAINING	X
III	AUDILE VISILE	X	HAWTHORNE	X	HAWTHORNE	X

From: Sabatino, Ysseldyke, & Woolston, 1972.

TABLE 13

EXPERIMENTAL DESIGN OF THE TWO-PHASE STUDY TO DETERMINE THE LEARNING EFFICIENCY OF MENTALLY RETARDED CHILDREN USING AUDITORY AND VISUAL PERCEPTUAL METHODS

GROUP	SUBJECT CELLS	PRE TEST	PHASE I	POST TEST	PHASE II	POST TEST
I	AUDILE VISILE	X	AUDITORY TRAINING	X	CONTROL	X
II	AUDILE VISILE	X	CONTROL	X	VISUAL TRAINING	X
III	AUDILE VISILE	X	HAWTHORNE	X	HAWTHORNE	X

From: Sabatino, Ysseldyke, & Woolston, 1972.

Conclusion

The major unanswered question in the management of neglected and delinquent institutionalized children resides around the most appropriate form of instruction to be used. Answers to this question are dependent upon research drawing on curriculum designs with these children. The "state of the art" still seems to reflect the out-of-sight, out-of-mind attitude of most citizens towards the delinquent. It is true that our present efforts have achieved only marginal success. Therefore, what have we to lose by evaluating and demonstrating what we are doing, while systematically learning about these youth as if society's or someone's happiness just might depend upon it?

References

Bannatyne, A. Diagnostic and remedial techniques for use with dyslexic children. Academic Therapy Quarterly, 1968, 3, 213-224.

Bannatyne, A. Diagnosing learning disabilities and writing remedial prescriptions. Journal of Learning Disabilities, 1969, 1, 242-249.

Bateman, B. Learning disabilities: Yesterday, today, and tomorrow. Exceptional Children, 1964, 31, 167-177.

Bateman, B. Implication of a learning disability approach for teaching educable retardates. Mental Retardation, 1967 a, 5, 23-25.

Bateman, B. Three approaches to diagnosis and educational planning for children with learning disabilities. Academic Therapy Quarterly, 1967 b, 3, 11-16.

Bateman, B. The efficacy of an auditory and a visual method of first grade reading instruction with auditory and visual learners. In H. K. Smith (Ed.), Perception and Reading. Newark, Delaware: International Reading Association, 1968.

Bracht, G. H. Experimental factors related to aptitude-treatment interactions. Review of Educational Research, 1970, 40, 627-645.

Bracht, G. H., & Glass, G. V. The external validity of experiments. American Educational Research Journal, 1968, 5, 437-474.

Bruininks, R. H. Teaching word recognition to disadvantaged boys. Journal of Learning Disabilities, 1967, 3, 30-39.

Capobianco, R. G. Diagnostic methods used with learning disability cases. Exceptional Children, 1964, 31, 187-193.

Chalfant, J. R., & Scheffelin, M. A. Central processing dysfunctions in children: A review of the research. NINDS Monograph No. 9, 1969.

Cronbach, L. J. The two disciplines of scientific psychology. American Psychologist, 1957, 12, 671-684.

Cronbach, L. J. How can instruction be adapted to individual differences? In R. M. Gagne (Ed.), Learning and Individual Differences. Columbus, Ohio: Merrill Books, 1967.

Frostig, M. Testing as a basis for educational therapy. Journal of Special Education, 1967, 2, 15-34.

Haring, N. G., & Ridgway, R. W. Early identification of children with learning disabilities. Exceptional Children, 1967, 33, 387-395.

Jackson, L. T., & Ligons, D. C. Statistics on public institutions for delinquent children. Washington, D. C.: U. S. Department of Health, Education, and Welfare, 1966.

Janssen, D. R. Effects of visual and auditory perceptual preferences and letter discrimination pretraining on word recognition. Unpublished Doctoral Dissertation, The Pennsylvania State University, 1971.

Johnson, D., & Myklebust, H. Learning disabilities: Educational principles and practices. New York. Grune and Stratton, 1967.

Kirk, S. A., & McCarthy, J. J. The Illinois Test of Psycholinguistic Abilities: An approach to differential diagnosis. American Journal of Mental Deficiency, 1961, 65, 399-412.

Lubin, A. The interpretation of significant interaction. Educational and Psychological Measurement, 1961, 21, 807-817.

McClurg, W. H. Dyslexia: Early identification and treatment in the schools. Journal of Learning Disabilities, 1970, 3, 34-39.

National Advisory Committee on Handicapped Children. Toward fulfillment of the nation's commitment. First Annual Report. Washington, D. C.: U. S. Office of Education, January 31, 1968.

Opening doors through educational programs for institutionalized delinquents. Washington, D. C.: Superintendent of Documents, U. S. Government Printing Office.

Reynolds, M. C. A strategy for research. Exceptional Children, 1963, 29, 213-219.

Reynolds, M. C., & Balow, B. Categories and variables in special education. Exceptional Children, 1972, 38, 357-366.

Ryckman, D. B. A comparison of information processing abilities of middle- and lower-class Negro kindergarten boys. Exceptional Children, 1967, 33, 545-552.

Sabatino, D. A. Information processing behaviors associated with learning disabilities. Journal of Learning Disabilities, 1968, 1, 440-450.

Sabatino, D. A. The construction and assessment of an experimental test of auditory perception. Exceptional Children, 1969, 36, 729-737.

Sabatino, D. A. Prescriptive teaching in a summer learning disabilities program. Journal of Learning Disabilities, 1970, 3, 220-227.

Sabatino, D. A., & Hayden, D. L. Information processing behaviors related to learning disabilities and educable mental retardation. Exceptional Children, 1970 a, 37, 21-30.

Sabatino, D. A., & Hayden, D. L. Variation in information processing behaviors as related to chronological age differences for children failing the elementary grades. Journal of Learning Disabilities, 1970 b, 3, 404-412.

Sabatino, D. A., & Ysseldyke, J. E. An evaluation of diagnostic-prescriptive teaching with handicapped children. University Park, Pennsylvania: Mimeograph, 1972.

Sabatino, D. A., Ysseldyke, J. E., & Woolston, J. Diagnostic-prescriptive teaching utilizing perceptual strengths of mentally retarded children. American Journal of Mental Deficiency, 1972. (In press.)

Schiller, J., & Deignan, M. An approach to the diagnosis and remediation of learning disabilities. Journal of Learning Disabilities, 1969, 2, 508-524.

Wedell, K. Diagnosing learning difficulties: A sequential strategy. Journal of Learning Disabilities, 1970, 3, 311-317.

Ysseldyke, J. E. Diagnostic-prescriptive teaching: The search for aptitude-treatment interactions. In L. Mann, & D. A. Sabatino (Eds.), First Review of Special Education, Vol. I. Philadelphia, Pennsylvania: Buttonwood Farms, 1973.

Ysseldyke, J. E., & Sabatino, D. A. Identification of strengths and weaknesses on the Illinois Test of Psycholinguistic Abilities. Journal of Clinical Psychology, 1972. (In press.)